

=> d his ful

(FILE 'HOME' ENTERED AT 14:50:36 ON 07 MAR 2006)

FILE 'REGISTRY' ENTERED AT 14:51:14 ON 07 MAR 2006

L1 STR  
L3 4778 SEA SSS FUL L1  
L4 STR  
L5 STR  
L6 STR  
L8 12 SEA SUB=L3 SSS FUL L4 OR L5 OR L6

FILE 'HCAPLUS' ENTERED AT 15:08:44 ON 07 MAR 2006

L9 1 SEA ABB=ON PLU=ON L8  
D STAT QUE  
D IBIB ABS HITSTR L9 1

FILE 'CASREACT' ENTERED AT 15:09:22 ON 07 MAR 2006

L10 0 SEA ABB=ON PLU=ON L8  
D STAT QUE L10  
L11 37 SEA ABB=ON PLU=ON L3

FILE 'REGISTRY' ENTERED AT 15:10:37 ON 07 MAR 2006

L12 241477 SEA ABB=ON PLU=ON ETHYLENE OR PROPYLENE OR BUTENE  
L13 271738 SEA ABB=ON PLU=ON BUTADIENE OR PENTENE OR HEXENE OR HEPTENE  
OR OCTENE OR NONENE OR DECENE OR ISOBUTYLENE OR CYCLOHEXENE OR  
CYCLOHEXADIENE OR STYRENE OR DIVINYLBENZENE

FILE 'REGISTRY' ENTERED AT 15:15:23 ON 07 MAR 2006

L14 138 SEA ABB=ON PLU=ON ALKENYL  
L15 99794 SEA ABB=ON PLU=ON ETHYLENE

FILE 'CASREACT' ENTERED AT 15:16:52 ON 07 MAR 2006

L17 2 SEA ABB=ON PLU=ON L11 AND (ETHYLENE OR PROPYLENE OR BUTENE  
OR ALKYLENE)  
L18 0 SEA ABB=ON PLU=ON L11 AND (BUTADIENE OR PENTENE OR HEXENE OR  
HEPTENE OR OCTENE OR NONENE OR DECENE OR ISOBUTYLENE OR  
CYCLOHEXENE OR CYCLOHEXADIENE OR STYRENE OR DIVINYLBENZENE)  
L19 2 SEA ABB=ON PLU=ON L17 OR L18  
D STAT QUE L19  
D CRD  
D IBIB ABS CRD 1-2

FILE 'HCAPLUS' ENTERED AT 15:23:27 ON 07 MAR 2006

L20 2085077 SEA ABB=ON PLU=ON L12 OR ETHYLENE OR PROPYLENE OR BUTENE OR  
ALKENYL  
L21 922921 SEA ABB=ON PLU=ON L13 OR BUTADIENE OR PENTENE OR HEXENE OR  
HEPTENE OR OCTENE OR NONENE OR DECENE OR ISOBUTYLENE OR  
CYCLOHEXENE OR CYCLOHEXADIENE OR STYRENE OR DIVINYLBENZENE  
L22 25 SEA ABB=ON PLU=ON L14  
L23 3912 SEA ABB=ON PLU=ON L3  
L24 401 SEA ABB=ON PLU=ON L23 (L) (L20 OR L21 OR L22)  
E REACTANT/RL  
L25 468924 SEA ABB=ON PLU=ON (L20 OR L21 OR L22) (L) REACTANT?/RL  
L26 44 SEA ABB=ON PLU=ON L24 AND L25  
L27 11 SEA ABB=ON PLU=ON CYCLIC(W) ALIPHATIC(L) POLYAMINE  
L28 8 SEA ABB=ON PLU=ON L27 AND (L20 OR L21 OR L22)  
L29 51 SEA ABB=ON PLU=ON L26 OR L28  
D STAT QUE L29  
D IBIB ABS HITSTR L29 1-51



FILE HOME

FILE REGISTRY

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 6 MAR 2006 HIGHEST RN 876011-49-3

DICTIONARY FILE UPDATES: 6 MAR 2006 HIGHEST RN 876011-49-3

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH January 6, 2006

Please note that search-term pricing does apply when conducting SmartSELECT searches.

\*\*\*\*\*  
\*  
\* The CA roles and document type information have been removed from \*  
\* the IDE default display format and the ED field has been added, \*  
\* effective March 20, 2005. A new display format, IDERL, is now \*  
\* available and contains the CA role and document type information. \*  
\*  
\*\*\*\*\*

Structure search iteration limits have been increased. See HELP SLIMITS for details.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/ONLINE/UG/regprops.html>

FILE HCAPLUS

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FILE COVERS 1907 - 7 Mar 2006 VOL 144 ISS 11

FILE LAST UPDATED: 6 Mar 2006 (20060306/ED)

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This file contains CAS Registry Numbers for easy and accurate substance identification.

FILE CASREACT

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for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications.

FILE CONTENT:1840 - 5 Mar 2006 VOL 144 ISS 10

New CAS Information Use Policies, enter HELP USAGETERMS for details.

```
*****
*
*      CASREACT now has more than 10 million reactions
*
*****
```

Some CASREACT records are derived from the ZIC/VINITI database (1974-1991) provided by InfoChem, INPI data prior to 1986, and Biotransformations database compiled under the direction of Professor Dr. Klaus Kieslich.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=>



=> fil hcaplus

FILE 'HCAPLUS' ENTERED AT 15:08:44 ON 07 MAR 2006

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PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

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FILE COVERS 1907 - 7 Mar 2006 VOL 144 ISS 11

FILE LAST UPDATED: 6 Mar 2006 (20060306/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

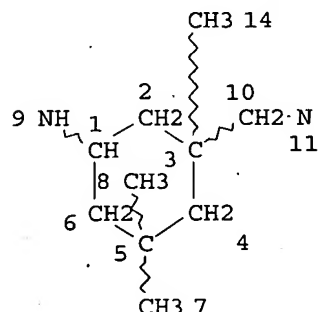
This file contains CAS Registry Numbers for easy and accurate substance identification.

=>

=>

=> d stat que

L1 STR



NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

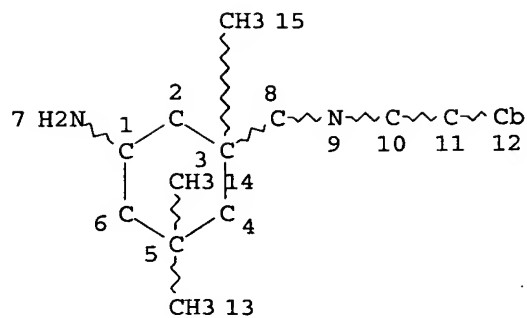
RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 12

STEREO ATTRIBUTES: NONE

L3 4778 SEA FILE=REGISTRY SSS FUL L1

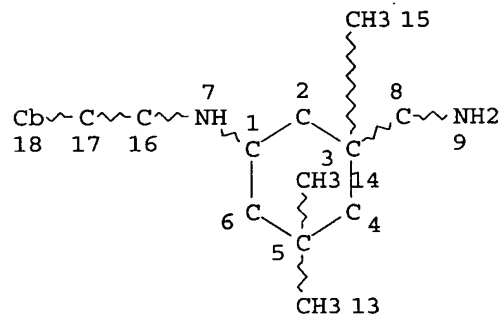
L4 STR



NODE ATTRIBUTES:  
 DEFAULT MLEVEL IS ATOM  
 GGCAT IS MCY AT 12  
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
 RING(S) ARE ISOLATED OR EMBEDDED  
 NUMBER OF NODES IS 15

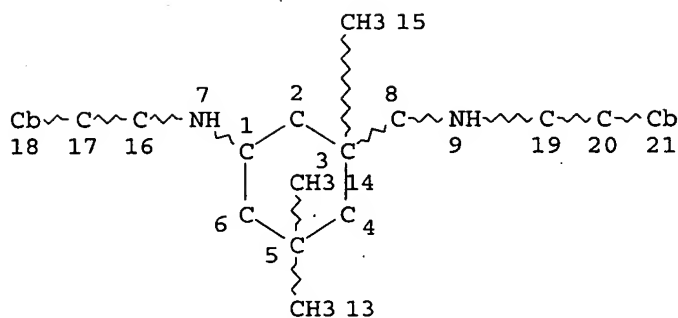
STEREO ATTRIBUTES: NONE  
 L5 STR



NODE ATTRIBUTES:  
 DEFAULT MLEVEL IS ATOM  
 GGCAT IS MCY AT 18  
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
 RING(S) ARE ISOLATED OR EMBEDDED  
 NUMBER OF NODES IS 15

STEREO ATTRIBUTES: NONE  
 L6 STR



## NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

GGCAT IS MCY AT 18

DEFAULT ECLEVEL IS LIMITED

## GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 18

## STEREO ATTRIBUTES: NONE

L8 12 SEA FILE=REGISTRY SUB=L3 SSS FUL L4 OR L5 OR L6

L9 1 SEA FILE=HCAPLUS ABB=ON PLU=ON L8

=&gt; d ibib abs hitstr l9 1

L9 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:261002 HCAPLUS

DOCUMENT NUMBER: 140:288916

TITLE: Modified cyclic aliphatic polyamine, epoxy resin composition, and cured product

INVENTOR(S): Koyama, Takeshi; Ichikawa, Tetsushi; Kuwahara, Hisayuki; Echigo, Masatoshi

PATENT ASSIGNEE(S): Mitsubishi Gas Chemical Company, Inc., Japan

SOURCE: Eur. Pat. Appl., 14 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1403244	A2	20040331	EP 2003-20588	20030918
EP 1403244	A3	20040804		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
JP 2004115427	A2	20040415	JP 2002-280556	20020926
JP 2004217560	A2	20040805	JP 2003-6126	20030114
US 2004106684	A1	20040603	US 2003-669701	20030925
PRIORITY APPLN. INFO.:			JP 2002-280556	A 20020926
			JP 2003-6126	A 20030114

AB A modified cyclic aliphatic polyamine has a low viscosity and content of unreacted polyamine and when used as a curing agent for an epoxy resin composition has an improved workability without adding solvent or diluent. The above modified cyclic aliphatic polyamine is obtained by addition reaction of a

cyclic aliphatic polyamine such as isophoronediamine and norbornanediamine and an alkenyl compound such as styrene. The reaction of 4 mol isophoronediamine and 4 mol styrene gave a product (containing mono and di substituted diamine) which was used to cure an Epicoat 828 coating composition (48 phr cure agent) showing excellent water resistance (water drop test at 1/4/7 day intervals), chemical resistance (10% NaOH and H<sub>2</sub>SO<sub>4</sub> solns. for 7 days at room temperature), and salt spray resistance (JIS K5400).

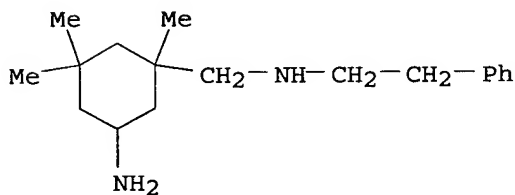
IT 675455-85-3P 675455-91-1P 675455-97-7P

RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)

(styrene modified cyclic aliphatic polyamine crosslinker for epoxy resin cured product and coating having improved water, chemical and corrosion resistance)

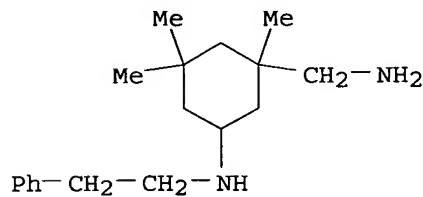
RN 675455-85-3 HCAPLUS

CN Benzeneethanamine, N-[(5-amino-1,3,3-trimethylcyclohexyl)methyl]- (9CI)  
(CA INDEX NAME)



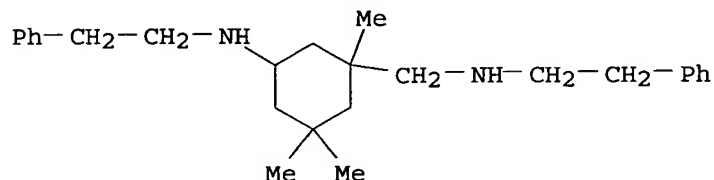
RN 675455-91-1 HCAPLUS

CN Benzeneethanamine, N-[3-(aminomethyl)-3,5,5-trimethylcyclohexyl]- (9CI)  
(CA INDEX NAME)



RN 675455-97-7 HCAPLUS

CN Benzeneethanamine, N-[[1,3,3-trimethyl-5-[(2-phenylethyl)amino]cyclohexyl)methyl]- (9CI) (CA INDEX NAME)



=> => fil casreact

FILE 'CASREACT' ENTERED AT 15:09:22 ON 07 MAR 2006

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FILE CONTENT:1840 - 5 Mar 2006 VOL 144 ISS 10

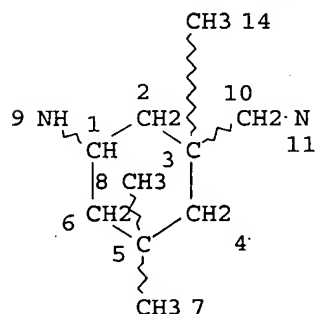
New CAS Information Use Policies, enter HELP USAGETERMS for details.

```
*****
*
*      CASREACT now has more than 10 million reactions
*
*****
```

Some CASREACT records are derived from the ZIC/VINITI database (1974-1991) provided by InfoChem, INPI data prior to 1986, and Biotransformations database compiled under the direction of Professor Dr. Klaus Kieslich.

This file contains CAS Registry Numbers for easy and accurate substance identification.

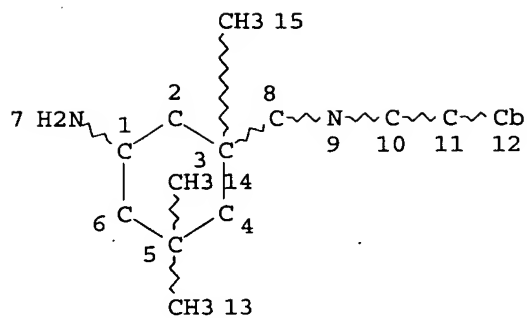
```
=>
=> d stat que l10
L1          STR
```



NODE ATTRIBUTES:  
 DEFAULT MLEVEL IS ATOM  
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
 RING(S) ARE ISOLATED OR EMBEDDED  
 NUMBER OF NODES IS 12

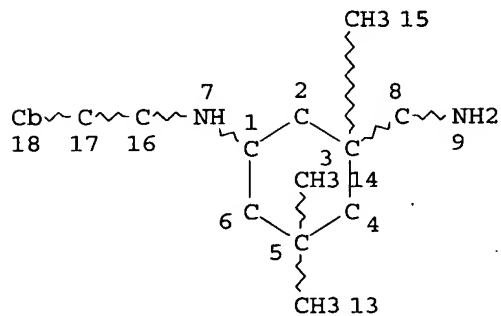
STEREO ATTRIBUTES: NONE  
 L3 4778 SEA FILE=REGISTRY SSS FUL L1  
 L4 STR



NODE ATTRIBUTES:  
 DEFAULT MLEVEL IS ATOM  
 GGCAT IS MCY AT 12  
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
 RING(S) ARE ISOLATED OR EMBEDDED  
 NUMBER OF NODES IS 15

STEREO ATTRIBUTES: NONE  
 L5 STR

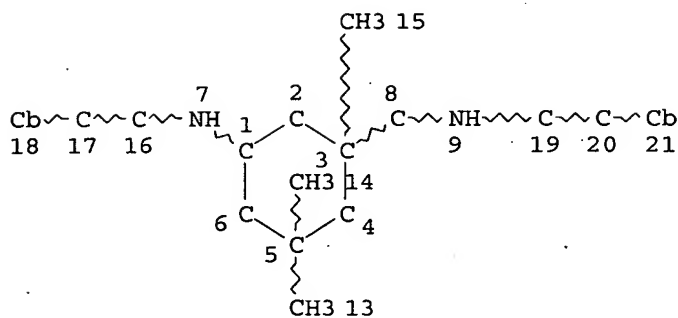


NODE ATTRIBUTES:  
 DEFAULT MLEVEL IS ATOM  
 GGCAT IS MCY AT 18  
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
 RING(S) ARE ISOLATED OR EMBEDDED  
 NUMBER OF NODES IS 15

STEREO ATTRIBUTES: NONE  
 L6 STR





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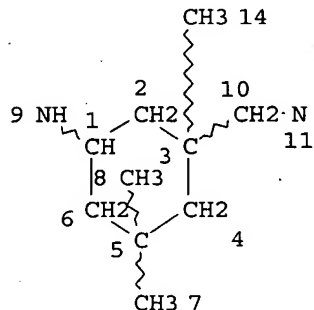
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
GGCAT      IS MCY   AT 18
DEFAULT ECLEVEL IS LIMITED

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GRAPH ATTRIBUTES:  
RING(S) ARE ISOLATED OR EMBEDDED  
NUMBER OF NODES IS 18

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STEREO ATTRIBUTES: NONE
L8          12 SEA FILE=REGISTRY SUB=L3 SSS FUL L4 OR L5 OR L6
L10         0 SEA FILE=CASREACT ABB=ON  PLU=ON  L8
```

```
=> => d stat que l19
L1 STR
```



NODE ATTRIBUTES:  
 DEFAULT MLEVEL IS ATOM  
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
RING(S) ARE ISOLATED OR EMBEDDED  
NUMBER OF NODES IS 12

```
STEREO ATTRIBUTES: NONE
L3          4778 SEA FILE=REGISTRY SSS FUL L1
L11         37 SEA FILE=CASREACT ABB=ON PLU=ON L3
L17         2 SEA FILE=CASREACT ABB=ON PLU=ON L11 AND (ETHYLENE OR
PROPYLENE OR BUTENE OR ALKYLENE)
L18         0 SEA FILE=CASREACT ABB=ON PLU=ON L11 AND (BUTADIENE OR
PENTENE OR HEXENE OR HEPTENE OR OCTENE OR NONENE OR DECENE OR
ISOBUTYLENE OR CYCLOHEXENE OR CYCLOHEXADIENE OR STYRENE OR
DIVINYLBENZENE)
```

L19 2 SEA FILE=CASREACT ABB=ON PLU=ON L17 OR L18

=&gt; =&gt; d ibib abs crd 1-2

L19 ANSWER 1 OF 2 CASREACT COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 124:37797 CASREACT  
 TITLE: Polymers of unsaturated carbohydrate derivatives for  
 use in biomedical articles  
 INVENTOR(S): Bachmann, Frank; Lohmann, Dieter; Chabreck, Peter  
 PATENT ASSIGNEE(S): Ciba-Geigy A.-G., Switz.  
 SOURCE: Eur. Pat. Appl., 23 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

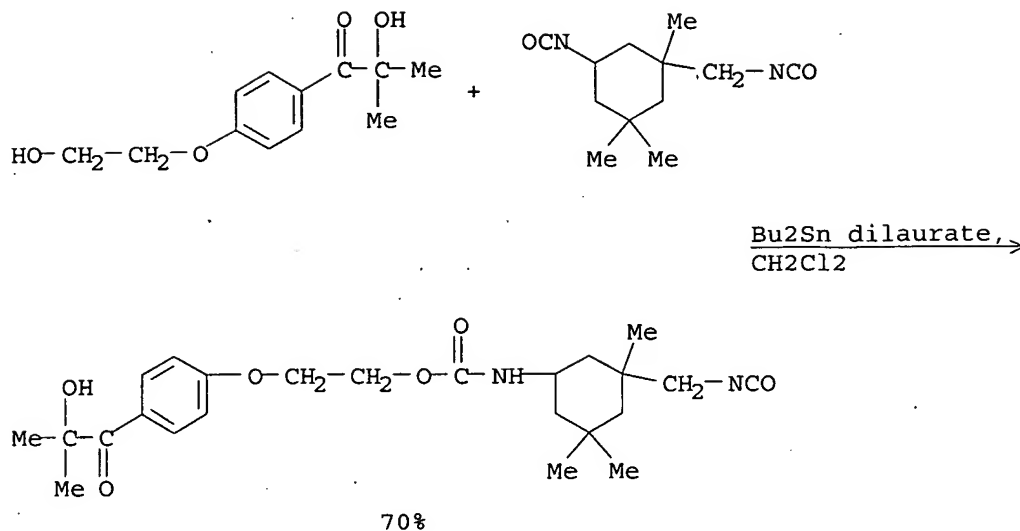
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 668294	A1	19950823	EP 1995-810079	19950207
EP 668294	B1	19990818		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
AT 183517	E	19990915	AT 1995-810079	19950207
AU 9511644	A1	19950824	AU 1995-11644	19950208
AU 695525	B2	19980813		
CA 2142435	AA	19950816	CA 1995-2142435	19950213
FI 9500623	A	19950816	FI 1995-623	19950213
JP 07278204	A2	19951024	JP 1995-24108	19950213
US 5693768	A	19971202	US 1995-388006	19950213
ZA 9501169	A	19950815	ZA 1995-1169	19950214
NO 9500548	A	19950816	NO 1995-548	19950214
CN 1126213	A	19960710	CN 1995-101516	19950214
US 5856416	A	19990105	US 1997-867747	19970603
PRIORITY APPLN. INFO.:			EP 1994-810084	19940215
			US 1995-388006	19950213

OTHER SOURCE(S): MARPAT 124:37797

GI For diagram(s), see printed CA Issue.

AB Carbohydrate derivs. R1(CO2A)m(O2CNHR)n(NHCO)pYZ (R1 = carbohydrate group  
 subject to radical polymerization; A = C1-10 **alkylene**; R = C≤20  
 organic diisocyanate radical; Y = O, NH; Z = mono- or oligosaccharide,  
 cyclodextrin, anhydrosaccharide; m, n, p = 0, 1) can be used in production of  
 polymers useful for contact lenses and other biomedical articles, drug  
 delivery systems, membranes, photoresists, etc. The monomers are obtained  
 by selective reaction of an unprotected carbohydrate with an unsatd.  
 compound, especially an isocyanate, to form a monosubstituted derivative. Thus,  
 contact lenses of poly(hydroxyethyl methacrylate) were surface treated  
 with I [reaction product of 4'-(β-hydroxyethoxy)-2-hydroxyprop-2-  
 ylphenone and isophorone diisocyanate], then soaked in an aqueous solution of  
 6-O-carbamoylmethacryloylethyl-α,α-trehalose (preparation given),  
 purged to remove O, exposed to an Hg lamp, washed, and dried. The treated  
 lenses showed improved hydrophilicity and water retention.

RX(2) OF 43



L19 ANSWER 2 OF 2 CASREACT COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 121:300515 CASREACT

TITLE: Preparation of 3-aminomethyl-3,5,5-trimethylcyclohexylamine

INVENTOR(S): Ookawa, Takashi; Kimizuka, Kenichi; Dotani, Masaharu; Sato, Yoshifumi

PATENT ASSIGNEE(S): Mitsubishi Gas Chemical Co., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

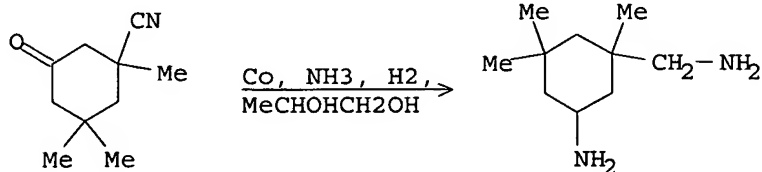
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

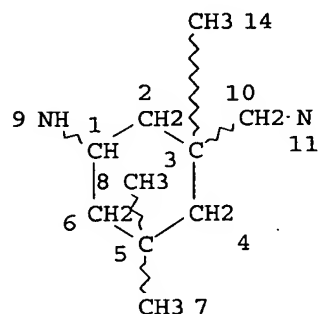
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 06219995	A2	19940809	JP 1991-278745	19910930
PRIORITY APPLN. INFO.:			JP 1991-278745	19910930

AB The title compound (I), useful as crosslinking agents for epoxy resins or intermediate for isophorone diisocyanate (no data), is prepared by reaction of 3-cyano-3,5,5-trimethylcyclohexanone (II) with  $\text{NH}_3$  and  $\text{H}_2$  in presence of reduced Co catalysts and glycols. II was treated with **propylene glycol** and Co-Zr/diatomaceous earth catalyst under  $\text{NH}_3$ - $\text{H}_2$  at  $120^\circ$  and 130 kg/cm<sup>2</sup> to give a product containing 91.8% I with 100% conversion.

RX(1) OF 1



=> => d stat que 129  
L1 STR



NODE ATTRIBUTES:  
DEFAULT MLEVEL IS ATOM  
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
RING(S) ARE ISOLATED OR EMBEDDED  
NUMBER OF NODES IS 12

STEREO ATTRIBUTES: NONE

L3	4778	SEA FILE=REGISTRY SSS FUL L1
L12	241477	SEA FILE=REGISTRY ABB=ON PLU=ON ETHYLENE OR PROPYLENE OR BUTENE
L13	271738	SEA FILE=REGISTRY ABB=ON PLU=ON BUTADIENE OR PENTENE OR HEXENE OR HEPTENE OR OCTENE OR NONENE OR DECENE OR ISOBUTYLENE OR CYCLOHEXENE OR CYCLOHEXADIENE OR STYRENE OR DIVINYLBENZENE
L14	138	SEA FILE=REGISTRY ABB=ON PLU=ON ALKENYL
L20	2085077	SEA FILE=HCAPLUS ABB=ON PLU=ON L12 OR ETHYLENE OR PROPYLENE OR BUTENE OR ALKENYL
L21	922921	SEA FILE=HCAPLUS ABB=ON PLU=ON L13 OR BUTADIENE OR PENTENE OR HEXENE OR HEPTENE OR OCTENE OR NONENE OR DECENE OR ISOBUTYLENE OR CYCLOHEXENE OR CYCLOHEXADIENE OR STYRENE OR DIVINYLBENZENE
L22	25	SEA FILE=HCAPLUS ABB=ON PLU=ON L14
L23	3912	SEA FILE=HCAPLUS ABB=ON PLU=ON L3
L24	401	SEA FILE=HCAPLUS ABB=ON PLU=ON L23 (L) (L20 OR L21 OR L22)
L25	468924	SEA FILE=HCAPLUS ABB=ON PLU=ON (L20 OR L21 OR L22) (L) REACTANT ?/RL
L26	44	SEA FILE=HCAPLUS ABB=ON PLU=ON L24 AND L25
L27	11	SEA FILE=HCAPLUS ABB=ON PLU=ON CYCLIC (W) ALIPHATIC (L) POLYAMINE
L28	8	SEA FILE=HCAPLUS ABB=ON PLU=ON L27 AND (L20 OR L21 OR L22)
L29	51	SEA FILE=HCAPLUS ABB=ON PLU=ON L26 OR L28

=> d ibib abs hitstr 129 1-51

L29 ANSWER 1 OF 51 HCAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 2005:1173879 HCAPLUS  
DOCUMENT NUMBER: 143:441548  
TITLE: Method for forming hard-coated films with good scratch resistance  
INVENTOR(S): Tanimoto, Yoichi  
PATENT ASSIGNEE(S): Dainippon Ink and Chemicals, Inc., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 20 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2005305383	A2	20051104	JP 2004-129581	20040426
PRIORITY APPLN. INFO.:			JP 2004-129581	20040426

AB The films useful for surface protection, are formed by coating a UV-curable coating (A) having the JIS K-5400 standard elongation of  $\geq 80\%$  on a film substrate, then over-coating the coated surface with a UV-curable coating having the cured-film JIS K-5400 pencil hardness of  $>4H$ , and irradiating with UV lights. Thus, coating a mixed solvent-thinned photoinitiator-added urethane acrylate resin (giving UV-cured film with elongation  $110\%$ , pencil hardness B) derived from ethylene glycol monoacrylate ester IPDI carbamate and a polycaprolactone triester with trimethylolpropane on the surface of a Cosmoline A 4100 (PET) to a dry thickness of  $5.5 \mu\text{m}$ , drying at  $70^\circ$  for 10 min, over-coating with mixed solvent-thinned composition (giving cured film having pencil hardness  $7H$ ) containing the reaction product of IPDI and Aronix M 305 (pentaerythritol triacrylate), Kayarad DPHA and photoinitiator to dry thickness  $9.2 \mu\text{m}$  and curing with UV radiation gave a coated film having good processability and pencil hardness  $2H$ .

IT 852356-28-6P  
 RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (UV-curable coating; method for forming hard-coated films with good scratch resistance)

RN 852356-28-6 HCAPLUS  
 CN Hexanedioic acid, polymer with 1,4-butanediol and 1,2-ethanediol, ester with [3-[(carboxyamino)methyl]-3,5,5-trimethylcyclohexyl]carbamic acid mono[2-[(1-oxo-2-propenyl)oxy]ethyl] ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

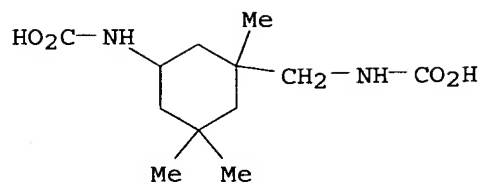
CRN 852356-27-5  
 CMF C17 H28 N2 O6 . x (C6 H10 O4 . C4 H10 O2 . C2 H6 O2)x

CM 2

CRN 325707-72-0  
 CMF C17 H28 N2 O6  
 CCI IDS

CM 3

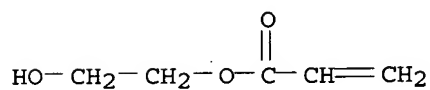
CRN 52337-42-5  
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CM 4

CRN 818-61-1

CMF C5 H8 O3



CM 5

CRN 26570-73-0

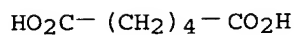
CMF (C6 H10 O4 . C4 H10 O2 . C2 H6 O2)x

CCI PMS

CM 6

CRN 124-04-9

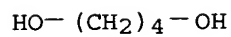
CMF C6 H10 O4



CM 7

CRN 110-63-4

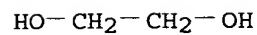
CMF C4 H10 O2



CM 8

CRN 107-21-1

CMF C2 H6 O2

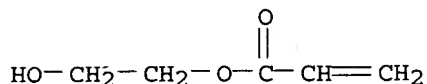


IT 818-61-1, Ethylene glycol monoacrylate  
 RL: RCT (Reactant); RACT (Reactant or reagent)

(method for forming hard-coated films with good scratch resistance)

RN 818-61-1 HCAPLUS

CN 2-Propenoic acid, 2-hydroxyethyl ester (9CI) (CA INDEX NAME)



L29 ANSWER 2 OF 51 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:1078310 HCAPLUS

DOCUMENT NUMBER: 143:347647

TITLE: Process for preparing polyisocyanate prepolymers containing allophanate structural units

INVENTOR(S): Mager, Michael; Simon, Joachim; Homann, Malte

PATENT ASSIGNEE(S): Bayer Materialscience Ag, Germany

SOURCE: U.S. Pat. Appl. Publ., 8 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005222366	A1	20051006	US 2005-87462	20050323
DE 102004015982	A1	20051020	DE 2004-102004015982	20040401
WO 2005097865	A1	20051020	WO 2005-EP2956	20050319

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: DE 2004-102004015982A 20040401

AB A method of preparing and stabilizing polyisocyanates that contain allophanate groups that are based on aliphatic and/or cycloaliph. polyisocyanates. The method includes reacting (a) one or more aliphatic and/or cycloaliph. polyisocyanates with (b) one or more polyhydroxy compds. to give an NCO-functional polyurethane prepolymer whose resultant urethane groups are reacted further with (c) aliphatic and/or cycloaliph. polyisocyanates, which may be different from those of (a), and (d) in the presence of catalysts and are thereby fully or partly allophanatized, and before, during and/or after the allophanatization, adding (e) acidic additives. The polyisocyanates can be used in coatings, adhesive bonds or seals. Such coatings include the stabilized polyisocyanate prepolymers, at least one diol or polyol and/or at least one linear and/or cyclic, aliphatic, araliph. and/or aromatic diamine or polyamine. The coatings can be used to coat substrates.

IT 9048-90-2P, 1,6-Diisocyanatohexane-polypropylene glycol copolymer  
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

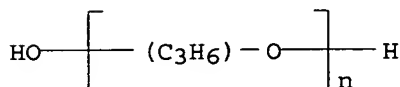
(process for preparing polyisocyanate prepolymers containing allophanate

structural units)

RN 9048-90-2 HCAPLUS  
 CN Poly[oxy(methyl-1,2-ethanediyl)],  $\alpha$ -hydro- $\omega$ -hydroxy-, polymer  
 with 1,6-diisocyanatohexane (9CI) (CA INDEX NAME)

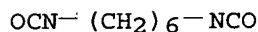
CM 1

CRN 25322-69-4  
 CMF (C3 H6 O)<sub>n</sub> H2 O  
 CCI IDS, PMS



CM 2

CRN 822-06-0  
 CMF C8 H12 N2 O2



L29 ANSWER 3 OF 51 HCAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2005:1078309 HCAPLUS  
 DOCUMENT NUMBER: 143:347646  
 TITLE: Process for preparing polyether allophanates using  
 zinc compound catalysts  
 INVENTOR(S): Mager, Michael; Simon, Joachim; Homann, Malte  
 PATENT ASSIGNEE(S): Bayer Materialscience Ag, Germany  
 SOURCE: U.S. Pat. Appl. Publ., 7 pp.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005222365	A1	20051006	US 2005-87249	20050323
DE 102004015983	A1	20051020	DE 2004-102004015983	20040401
WO 2005097737	A1	20051020	WO 2005-EP2955	20050319

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: DE 2004-102004015983A 20040401  
 AB A process for preparing polyisocyanate prepolymers containing allophanate

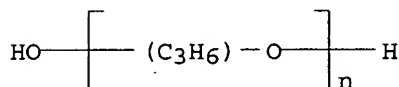


structural units and prepolymers prepared thereby. The process includes the steps of reacting (a) one or more aliphatic and/or cycloaliph. polyisocyanates with (b) one or more polyhydroxy compds. to give an NCO-functional polyurethane prepolymer, whose resultant urethane groups are fully or partly allophanatized; reacting the prepolymer with (c) polyisocyanates, which may be different from those of (a), and using (d) zinc(II) compds. as catalysts. The prepolymers can be used to produce coatings, adhesive bonds and/or seals. The coatings can include (A) one or more of the prepolymers and (B) at least one diol or polyol and/or (C) at least one linear and/or cyclic, aliphatic, araliph. and/or aromatic diamine or polyamine. The coatings can be used to coat substrates.

IT 9048-90-2P, 1,6-Diisocyanatohexane-polypropylene glycol copolymer  
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (process for preparing polyether allophanates using zinc compound catalysts)  
 RN 9048-90-2 HCAPLUS  
 CN Poly[oxy(methyl-1,2-ethanediyl)],  $\alpha$ -hydro- $\omega$ -hydroxy-, polymer with 1,6-diisocyanatohexane (9CI) (CA INDEX NAME)

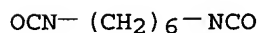
CM 1

CRN 25322-69-4  
 CMF (C3 H6 O)<sub>n</sub> H2 O  
 CCI IDS, PMS



CM 2

CRN 822-06-0  
 CMF C8 H12 N2 O2



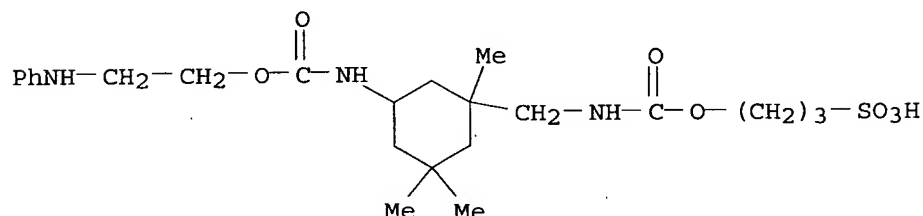
L29 ANSWER 4 OF 51 HCAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2005:667741 HCAPLUS  
 DOCUMENT NUMBER: 143:326959  
 TITLE: Colloidal and thermal stability of polyaniline-coated multi-core shell polystyrene latexes prepared using sulfonated N-hydroxyethyl aniline  
 AUTHOR(S): Shin, Jin Sup; Kim, Jung Hyun; Cheong, In Woo  
 CORPORATE SOURCE: Department of Chemical Engineering, Yonsei University, Seoul, 120-749, S. Korea  
 SOURCE: Synthetic Metals (2005), 151(3), 246-255  
 CODEN: SYMEDZ; ISSN: 0379-6779  
 PUBLISHER: Elsevier B.V.  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB Conductive polymer particles, poly(sulfonated N-hydroxyethyl aniline, SHEA)-polyaniline-poly(SHEA)-polystyrene (PSHEA-PANI-PSHEA-PSt) multi-core shell composite particles, were synthesized by chemical oxidation polymerization and an

effect of poly(SHEA) on the colloidal and thermal stability enhancement was investigated. The PSHEA-PANI-PSHEA-PSt particles showed spherical shape and nearly monodisperse particle size distribution. Elemental anal., UV-vis spectra, and Raman spectra revealed that polyaniline (PANI) was successfully coated onto the poly(SHEA) modified polystyrene particles. Conductivity of the PSHEA-PANI-PSHEA-PSt particle was higher than that of PANI-PSt particle after annealing at elevated temperature due to the non-volatile properties of poly(SHEA) as a co-dopant compared with inorg. dopants such as HCl. XPS anal. unveiled that the PANI in the PSHEA-PANI-PSHEA-PSt particle was co-doped by sulfonic acid in poly(SHEA), which increased conductive thermal stability of the particles.

IT 865157-59-1DP, derivative described as polymer  
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of polyaniline-coated multi-core shell **styrene**  
 copolymers)

RN 865157-59-1 HCAPLUS

CN 1-Propanesulfonic acid, 3-[[[1,3,3-trimethyl-5-[[[2-(phenylamino)ethoxy]carbonyl]amino]cyclohexyl]methyl]amino]carbonyl]oxy]-, monosodium salt (9CI) (CA INDEX NAME)



● Na

REFERENCE COUNT: 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L29 ANSWER 5 OF 51 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:587096 HCAPLUS

DOCUMENT NUMBER: 143:116172

TITLE: Manufacture of amino compositions with little residual polyamines

INVENTOR(S): Kuwahara, Hisamasa; Echigo, Masatoshi; Ogawa, Satoshi

PATENT ASSIGNEE(S): Mitsubishi Gas Chemical Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 15 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

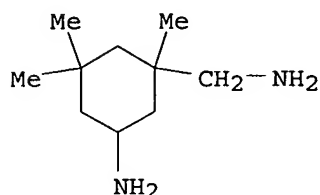
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2005179203	A2	20050707	JP 2003-418940	20031217
PRIORITY APPLN. INFO.:			JP 2003-418940	20031217
OTHER SOURCE(S): MARPAT 143:116172				
AB The manufacturing method contains addition reaction of hydrophilic polyamines with hydrophobic alkenyl compds. in the presence of strongly basic catalysts,				

extraction of residual hydrophilic polyamines with H<sub>2</sub>O to give amino compns. with contents of the residual polyamines ≤2%, and recovery of the residual polyamines by removal of H<sub>2</sub>O. The amino compns. by the method are useful for crosslinkers for epoxy resins and chain extenders for polyurethanes. Thus, reacting m-xylylenediamine (I) with styrene (II) in the presence of lithium amide (III), removing hydrolyzed III, extracting residual I with H<sub>2</sub>O gave a 52.7/41.7/4.0/1.6 mixture of I-II (1:1), I-II (1:2), I-II (1:3), and I.

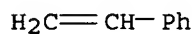
IT 2855-13-2DP, Isophorone diamine, reaction product with  
styrene  
RL: IMF (Industrial manufacture); PUR (Purification or recovery); PREP (Preparation)  
(manufacture of amino compns. with little residual polyamines)  
RN 2855-13-2 HCAPLUS  
CN Cyclohexanemethanamine, 5-amino-1,3,3-trimethyl- (9CI) (CA INDEX NAME)



IT 111-40-0P, Diethylenetriamine  
RL: PUR (Purification or recovery); RCT (Reactant); REM (Removal or disposal); PREP (Preparation); PROC (Process); RACT (Reactant or reagent)  
(manufacture of amino compns. with little residual polyamines)  
RN 111-40-0 HCAPLUS  
CN 1,2-Ethanediamine, N-(2-aminoethyl)- (9CI) (CA INDEX NAME)



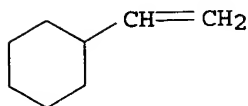
IT 100-42-5, Styrene, reactions 110-83-8,  
Cyclohexene, reactions 695-12-5, Vinylcyclohexane  
1321-74-0, Divinylbenzene, reactions 29797-09-9  
, Cyclohexadiene  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(manufacture of amino compns. with little residual polyamines)  
RN 100-42-5 HCAPLUS  
CN Benzene, ethenyl- (9CI) (CA INDEX NAME)



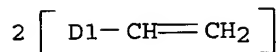
RN 110-83-8 HCAPLUS  
CN Cyclohexene (8CI, 9CI) (CA INDEX NAME)



RN 695-12-5 HCAPLUS  
CN Cyclohexane, ethenyl- (9CI) (CA INDEX NAME)



RN 1321-74-0 HCAPLUS  
CN Benzene, diethenyl- (9CI) (CA INDEX NAME)



RN 29797-09-9 HCAPLUS  
CN Cyclohexadiene (8CI, 9CI) (CA INDEX NAME)

CM 1

CRN 71-43-2  
CMF C6 H6



L29 ANSWER 6 OF 51 HCAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 2005:346119 HCAPLUS  
DOCUMENT NUMBER: 142:393488  
TITLE: Printed layer-containing laminates with good interlayer adhesive strength  
INVENTOR(S): Shimizu, Akihiko; Hsin, Lung-Yu; Yamashita, Takashi  
PATENT ASSIGNEE(S): Mitsubishi Chemical Corp., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 54 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2005104001	A2	20050421	JP 2003-341678	20030930
PRIORITY APPLN. INFO.:			JP 2003-341678	20030930

AB The laminates comprise (A) substrates, (B) printed layers, and (C) resin layers (laminated by melt extrusion without anchor coating agents). The layers B comprise printing inks containing colorants, solvents, and (a) polar group-containing stereoblock propylene polymers as binders wherein the main chains comprise isotactic blocks and amorphous blocks. The layers C may comprise compns. of (b) ethylene-C3-20- $\alpha$ -olefin copolymers with d. 0.860-0.935 g/cm<sup>3</sup> and MFR 0.1-100 dg/min or (d) propylene homopolymer or propylene copolymers with  $\leq 40\%$  C2-20- $\alpha$ -olefins showing MFR 0.1-100 dg/min. The laminates may have (c) crystalline propylene polymer layers with melting peak temperature  $\leq 140^\circ$  on A under B and C. The polymers a, b, and/or c may be prepared by polymerization employing

single-site

catalysts. Thus, stereoblock polypropylene prepared by polymerization using dichloro[[dimethylsilylene(cyclopentadienyl)(2-ethyl-4-methyl-4H-1-azulenyl)]] hafnium was reacted with maleic anhydride and mixed with colorant and solvents to give an ink, which was printed on nylon to give a bilayer film. Kernel KC 574 (linear low-d. ethylene-1-hexene copolymer) was extruded on the film to give laminate, showing tensile strength between the nylon layer and printed layer 30 g/15 min.

IT 126997-45-3D, Adipic acid-isophoronediamine-isophorone diisocyanate-3-methyl-1,5-pentanediol copolymer, reaction products with maleated stereoblock polypropylene

RL: TEM (Technical or engineered material use); USES (Uses)

(comprised of actual and assumed monomers, printed layers; laminates having polar stereoblock **propylene** polymers prepared by single-site catalysts in printed layers and showing good interlayer adhesive strength)

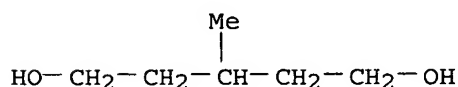
RN 126997-45-3 HCAPLUS

CN Hexanedioic acid, polymer with 5-amino-1,3,3-trimethylcyclohexanemethanamine, 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane and 3-methyl-1,5-pentanediol (9CI) (CA INDEX NAME)

CM 1

CRN 4457-71-0

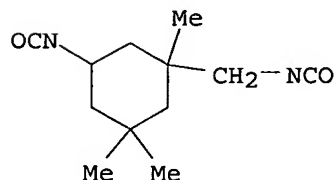
CMF C6 H14 O2



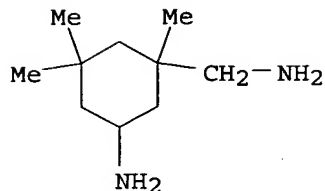
CM 2

CRN 4098-71-9

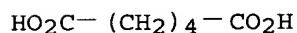
CMF C12 H18 N2 O2



CM 3

CRN 2855-13-2  
CMF C10 H22 N2

CM 4

CRN 124-04-9  
CMF C6 H10 O4

L29 ANSWER 7 OF 51 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:135408 HCAPLUS

DOCUMENT NUMBER: 142:220161

TITLE: Process for producing an amino composition useful for curing agent or chain extender

INVENTOR(S): Echigo, Masatoshi; Kuwara, Hisayuki; Koyama, Takeshi

PATENT ASSIGNEE(S): Mitsubishi Gas Chemical Company, Inc., Japan

SOURCE: Eur. Pat. Appl., 18 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1506953	A1	20050216	EP 2004-19044	20040811
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR				
US 2005038298	A1	20050217	US 2004-911478	20040805
JP 2005089455	A2	20050407	JP 2004-234039	20040811
PRIORITY APPLN. INFO.:			JP 2003-293133	A 20030813
OTHER SOURCE(S):	MARPAT 142:220161			

AB The process is done by addition reaction of a polyamine with an alkenyl group-containing compound wherein said polyamine is reacted preliminarily with

a strongly basic catalyst to produce a reaction mixture comprising a reaction intermediate and then an alkenyl group-containing compound is added to the reaction mixture to proceed the addition reaction provides an amino composition having stable properties. The amino composition is useful for epoxy curing agent or chain extender for polyurethanes. Thus, heating m-xylylenediamine 817.2 with Li amide 2.9 to 80°, stirring for 30 min, adding styrene 625.2, reacting at 80° for 30 min, combining with water 23.4 g and working up gave an addition product mixture

IT 100-42-5DP, Styrene, addition reaction products with polyamines 111-40-0DP, Diethylenetriamine, addition reaction products with alkenyl compound 112-24-3DP, Triethylenetetramine, addition reaction products with alkenyl compound 929-59-9DP, Jeffamine EDR 148, addition reaction products with alkenyl compound 2855-13-2DP, Isophoronediamine, addition reaction products with alkenyl compound 9046-10-0DP, Jeffamine D 230, addition reaction products with alkenyl compound  
 RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)  
 (process for producing an amino composition useful for curing agent or chain extender)

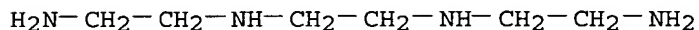
RN 100-42-5 HCAPLUS  
 CN Benzene, ethenyl- (9CI) (CA INDEX NAME)



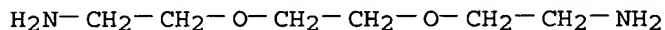
RN 111-40-0 HCAPLUS  
 CN 1,2-Ethanediamine, N-(2-aminoethyl)- (9CI) (CA INDEX NAME)



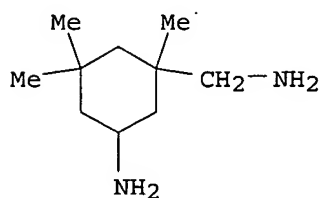
RN 112-24-3 HCAPLUS  
 CN 1,2-Ethanediamine, N,N'-bis(2-aminoethyl)- (9CI) (CA INDEX NAME)



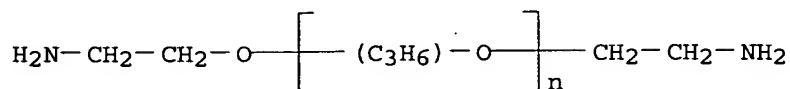
RN 929-59-9 HCAPLUS  
 CN Ethanamine, 2,2'-[1,2-ethanediylbis(oxy)]bis- (9CI) (CA INDEX NAME)



RN 2855-13-2 HCAPLUS  
 CN Cyclohexanemethanamine, 5-amino-1,3,3-trimethyl- (9CI) (CA INDEX NAME)



RN 9046-10-0 HCAPLUS  
 CN Poly[oxy(methyl-1,2-ethanediyl)], α-(2-aminomethylethyl)-ω-(2-aminomethylethoxy)- (9CI) (CA INDEX NAME)



2 ( D1-Me )

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L29 ANSWER 8 OF 51 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:936124 HCAPLUS

DOCUMENT NUMBER: 141:396938

TITLE: Methods for preparing and applying polyurea elastomers and coatings

INVENTOR(S): Chen, Harry Zhong-Xiao

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 12 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004220369	A1	20041104	US 2003-429265	20030502
PRIORITY APPLN. INFO.:			US 2003-429265	20030502

AB According to an embodiment of the process, a nonarom. polyfunctional amine having a plurality of primary amino groups is provided. At least one of the primary amino groups is reacted with a nonarom. reaction polymerization rate

modifier to provide a secondary amino group having a hydroxyl-containing moiety and the second reactive hydrogen atom appended to the amino nitrogen. The nonarom. polyfunctional amine having the secondary amino moiety is combined with an aliphatic polyisocyanate into a sprayable composition

Isocyanate groups of the polyisocyanate are reacted with the primary and secondary amino groups to prepare the polyurea. Preferred examples of the reaction rate modifier include alkylene oxides and alkylene carbonates. A typical sprayable coating composition contained was prepared by mixing 50 parts mixture containing Jeffamine T-5000 26, Jeffamine D-2000 (I) 15, Jeffamine

T-403

(II) 16, isophoronediamine 6, and modified II (50% primary amine groups converted to secondary amine groups by reaction with propylene oxide) 35 parts with 50 parts 60:40 tetramethylxylene diisocyanate-I copolymer.

IT 2855-13-2DP, Isophoronediamine, polyurea rubbers with polypropylene glycol monoamine ether with trimethylolpropane adducts with propylene oxide

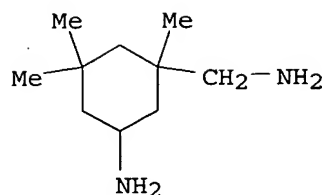
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(polyurea rubbers based on primary amines having amine groups converted to secondary amine groups for increased crosslinking time for sprayable coatings)

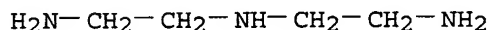
RN 2855-13-2 HCAPLUS

CN Cyclohexanemethanamine, 5-amino-1,3,3-trimethyl- (9CI) (CA INDEX NAME)





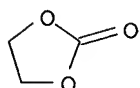
IT 111-40-0, Diethylenetriamine  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (precursor; polyurea rubbers based on primary amines having amine groups converted to secondary amine groups for increased crosslinking time for sprayable coatings)  
 RN 111-40-0 HCAPLUS  
 CN 1,2-Ethanediamine, N-(2-aminoethyl)- (9CI) (CA INDEX NAME)



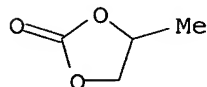
IT 75-21-8, Ethylene oxide, reactions 96-49-1, Ethylene carbonate 108-32-7, Propylene carbonate  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (primary amine modifier; polyurea rubbers based on primary amines having amine groups converted to secondary amine groups for increased crosslinking time for sprayable coatings)  
 RN 75-21-8 HCAPLUS  
 CN Oxirane (9CI) (CA INDEX NAME)



RN 96-49-1 HCAPLUS  
 CN 1,3-Dioxolan-2-one (9CI) (CA INDEX NAME)



RN 108-32-7 HCAPLUS  
 CN 1,3-Dioxolan-2-one, 4-methyl- (9CI) (CA INDEX NAME)



L29 ANSWER 9 OF 51 HCAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2004:261002 HCAPLUS  
 DOCUMENT NUMBER: 140:288916  
 TITLE: Modified cyclic aliphatic

**polyamine**, epoxy resin composition, and cured product  
 INVENTOR(S): Koyama, Takeshi; Ichikawa, Tetsushi; Kuwahara, Hisayuki; Echigo, Masatoshi  
 PATENT ASSIGNEE(S): Mitsubishi Gas Chemical Company, Inc., Japan  
 SOURCE: Eur. Pat. Appl., 14 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1403244	A2	20040331	EP 2003-20588	20030918
EP 1403244	A3	20040804		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
JP 2004115427	A2	20040415	JP 2002-280556	20020926
JP 2004217560	A2	20040805	JP 2003-6126	20030114
US 2004106684	A1	20040603	US 2003-669701	20030925
PRIORITY APPLN. INFO.:			JP 2002-280556	A 20020926
			JP 2003-6126	A 20030114

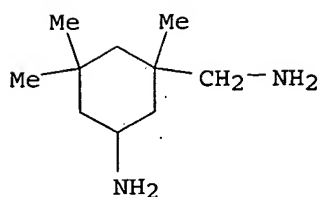
AB A modified **cyclic aliphatic polyamine** has a low viscosity and content of unreacted **polyamine** and when used as a curing agent for an epoxy resin composition has an improved workability without adding solvent or diluent. The above modified **cyclic aliphatic polyamine** is obtained by addition reaction of a **cyclic aliphatic polyamine** such as isophoronediamine and norbornanediamine and an **alkenyl** compound such as **styrene**. The reaction of 4 mol isophoronediamine and 4 mol **styrene** gave a product (containing mono and di substituted diamine) which was used to cure an Epicoat 828 coating composition (48 phr cure agent) showing excellent water resistance (water drop test at 1/4/7 day intervals), chemical resistance (10% NaOH and H2SO4 solns. for 7 days at room temperature), and salt spray resistance (JIS K5400).

IT 100-42-5, **Styrene**, reactions  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reaction with diamine; **styrene** modified **cyclic aliphatic polyamine** crosslinker for epoxy resin cured product and coating having improved water, chemical and corrosion resistance)

RN 100-42-5 HCAPLUS  
 CN Benzene, ethenyl- (9CI) (CA INDEX NAME)

H<sub>2</sub>C=CH-Ph

IT 2855-13-2, Isophoronediamine  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reaction with **styrene**; **styrene** modified **cyclic aliphatic polyamine** crosslinker for epoxy resin cured product and coating having improved water, chemical and corrosion resistance)  
 RN 2855-13-2 HCAPLUS  
 CN Cyclohexanemethanamine, 5-amino-1,3,3-trimethyl- (9CI) (CA INDEX NAME)



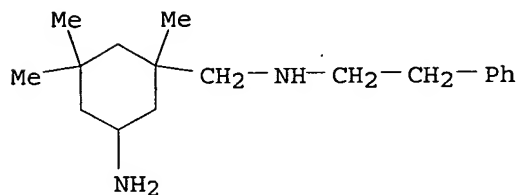
IT 675455-85-3P 675455-91-1P 675455-97-7P

RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)

(styrene modified cyclic aliphatic polyamine crosslinker for epoxy resin cured product and coating having improved water, chemical and corrosion resistance)

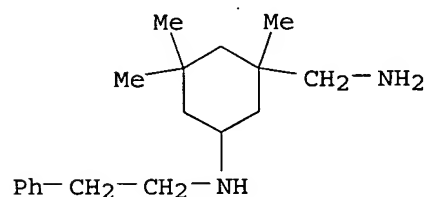
RN 675455-85-3 HCAPLUS

CN Benzeneethanamine, N-[(5-amino-1,3,3-trimethylcyclohexyl)methyl] - (9CI)  
(CA INDEX NAME)



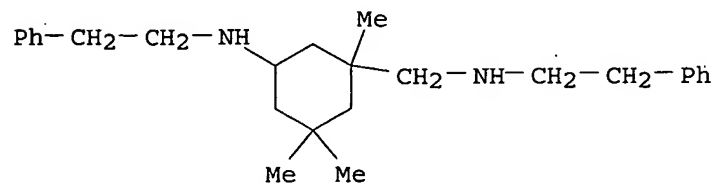
RN 675455-91-1 HCAPLUS

CN Benzeneethanamine, N-[3-(aminomethyl)-3,5,5-trimethylcyclohexyl] - (9CI)  
(CA INDEX NAME)



RN 675455-97-7 HCAPLUS

CN Benzeneethanamine, N-[[1,3,3-trimethyl-5-[(2-phenylethyl)amino]cyclohexyl]methyl] - (9CI) (CA INDEX NAME)



IT 25068-38-6

RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or

engineered material use); USES (Uses)

(styrene modified cyclic aliphatic

polyamine crosslinker for epoxy resin cured product and coating

having improved water, chemical and corrosion resistance)

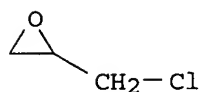
RN 25068-38-6 HCAPLUS

CN Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane  
(9CI) (CA INDEX NAME)

CM 1

CRN 106-89-8

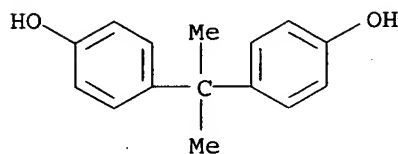
CMF C3 H5 Cl O



CM 2

CRN 80-05-7

CMF C15 H16 O2



L29 ANSWER 10 OF 51 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:159503 HCAPLUS

DOCUMENT NUMBER: 140:183309

TITLE: Polyurethane paste compositions, sagging-free sealants with good mechanical properties, and automotive bodies sealed therewith

INVENTOR(S): Yabuta, Hisashi; Yamamoto, Yusuke; Yokochi, Keiichi

PATENT ASSIGNEE(S): Sanyo Chemical Industries, Ltd., Japan; Toyota Motor Corp.

SOURCE: Jpn. Kokai Tokkyo Koho, 27 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004059906	A2	20040226	JP 2003-156196	20030602
PRIORITY APPLN. INFO.:			JP 2002-162733	A 20020604
			JP 2002-162746	A 20020604
			JP 2002-162768	A 20020604

AB The paste compns. comprise (A) polyurethane particles with volume-average diameter

(D1) 0.1-200  $\mu$ m and fractions (F1) of aspect ratio (long axis diameter/short axis diameter) 1.0-1.5  $\geq$ 50% (number-average value), (B)

plasticizers, (C) fillers, and (D) tackifiers consisting of (X) blocked urethane prepolymers derived from polyols and polyisocyanates and (Y) NCO-reactive polyfunctional compds. Also claimed are compns. comprising A 100, B 100-1000, C 1-1000, and (D') curing agents 100-600 parts, where D' consist of 90-300 parts X and 100-300 parts (Z) compds. having  $\geq 2$  of NCO-reactive groups. Sealants from the compns. are useful for edges or jointed parts of automobile steel plates. Thus, MDI-propoxylated bisphenol A-terephthalic acid copolymer dispersion was reacted with isophoronediamine and dibutylamine to give urethane particles (D1 5  $\mu$ m, F1 99%). A paste sealant containing 100:100:10:2.9 of the particles, Ca bicarbonate, MEK oxime-blocked polypropylene glycol-tolylene diisocyanate copolymer, and Polyimide L 2590 (dimer acid-based polyamide-polyamine) was applied on a metal sheet (precoated by cationic electrodeposition) and baked, showing shear adhesiveness 25 kg/cm<sup>2</sup>, breaking strength 43 kg/cm<sup>2</sup>, good flexural strength, and less sagging.

IT 300725-64-8DP, Isophorone diamine-MDI-polypropylene glycol block copolymer, reaction products with dibutylamine  
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(sagging-free polyurethane sealants with good mech. properties for automotive bodies)

RN 300725-64-8 HCAPLUS

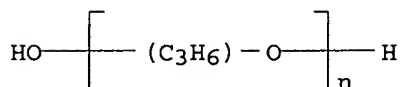
CN Cyclohexanemethanamine, 5-amino-1,3,3-trimethyl-, polymer with  $\alpha$ -hydro- $\omega$ -hydroxypoly[oxy(methyl-1,2-ethanediyl)] and 1,1'-methylenebis[4-isocyanatobenzene], block (9CI) (CA INDEX NAME)

CM 1

CRN 25322-69-4

CMF (C3 H6 O)<sub>n</sub> H2 O

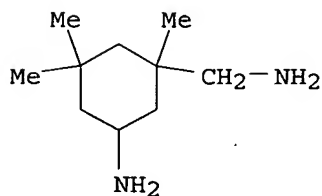
CCI IDS, PMS



CM 2

CRN 2855-13-2

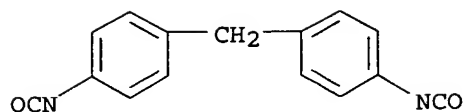
CMF C10 H22 N2



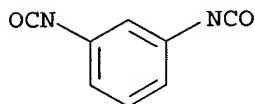
CM 3

CRN 101-68-8

CMF C15 H10 N2 O2

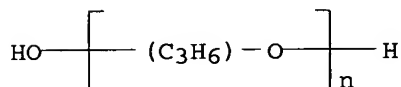


IT 9057-91-4D, Polypropylene glycol-tolylene diisocyanate copolymer,  
 reaction products with Me Et ketoxime  
 RL: MOA (Modifier or additive use); RCT (Reactant); TEM  
 (Technical or engineered material use); RACT (Reactant or reagent)  
 ; USES (Uses)  
 (tackifiers/curing agents; sagging-free polyurethane sealants with good  
 mech. properties for automotive bodies)  
 RN 9057-91-4 HCAPLUS  
 CN Poly[oxy(methyl-1,2-ethanediyl)],  $\alpha$ -hydro- $\omega$ -hydroxy-, polymer  
 with 1,3-diisocyanatomethylbenzene (9CI) (CA INDEX NAME)  
 CM 1  
 CRN 26471-62-5  
 CMF C9 H6 N2 O2  
 CCI IDS



D1- Me

CM 2  
 CRN 25322-69-4  
 CMF (C3 H6 O)<sub>n</sub> H2 O  
 CCI IDS, PMS



L29 ANSWER 11 OF 51 HCAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2004:20025 HCAPLUS  
 DOCUMENT NUMBER: 140:78236  
 TITLE: Acrylic polyurethane adhesives with  
 temperature-independent high adhesiveness and adhesive  
 sheets and tapes therefrom  
 INVENTOR(S): Ohira, Kazuaki; Shibata, Yoji; Hamada, Taro  
 PATENT ASSIGNEE(S): Sanyo Chemical Industries, Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 21 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent

LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004002827	A2	20040108	JP 2003-115761	20030421
PRIORITY APPLN. INFO.:			JP 2002-117192	A 20020419

AB The adhesives comprise (A) copolymers (mol. weight 300-80,000 per CO<sub>2</sub>H) prepared from (50-99.9):(0.1-20):(0-30) (%) (a1) C<sub>4</sub>-18 hydrocarbyl (meth)acrylates, (a2)  $\alpha,\beta$ -unsatd. carboxylic acids, and (a3) other comonomers, (B) amino- or quaternary ammonium salt-containing polyurethanes, and optionally (C) curing agents. Thus, 100 parts 2-ethylhexyl acrylate-acrylic acid copolymer was mixed with 6 parts TETRAD C [1,3-bis(N,N-diglycidylaminomethyl)cyclohexane] and 39 parts amino-terminated polyurethane [prepared from isophorone diisocyanate-Sannix PP 400 (polypropylene glycol) copolymer and isophoronediamine], applied on a PET film (Lumirror T), and dried to give an adhesive tape showing adhesive strength to stainless steel sheet 1160 and 1260 g/25 mm, at ordinary temperature and at 0°, resp.

IT 9045-05-0P  
 RL: IMF (Industrial manufacture); RCT (Reactant); TEM (Technical or engineered material use); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)  
 (amine-terminated; acrylic polyurethane adhesives (tapes, sheets) with temperature-independent high adhesiveness)

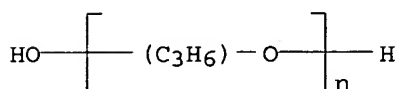
RN 9045-05-0 HCAPLUS  
 CN Cyclohexanemethanamine, 5-amino-1,3,3-trimethyl-, polymer with  $\alpha$ -hydro- $\omega$ -hydroxypoly[oxy(methyl-1,2-ethanediyl)] and 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane (9CI) (CA INDEX NAME)

CM 1

CRN 25322-69-4

CMF (C<sub>3</sub> H<sub>6</sub> O)<sub>n</sub> H<sub>2</sub> O

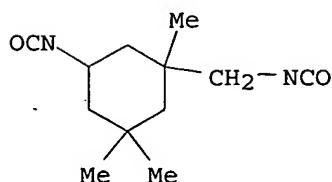
CCI IDS, PMS



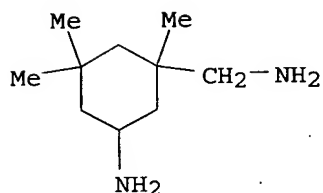
CM 2

CRN 4098-71-9

CMF C<sub>12</sub> H<sub>18</sub> N<sub>2</sub> O<sub>2</sub>



CM 3

CRN 2855-13-2  
CMF C10 H22 N2

L29 ANSWER 12 OF 51 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:591074 HCAPLUS  
 DOCUMENT NUMBER: 139:151178  
 TITLE: Method of forming coating film  
 INVENTOR(S): Seko, Kenji; Masuda, Kazuhiro; Matsuno, Yoshizumi  
 PATENT ASSIGNEE(S): Kansai Paint Co., Ltd., Japan  
 SOURCE: PCT Int. Appl., 27 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003061850	A1	20030731	WO 2003-JP399	20030120
W: DE, JP, US				
US 2005079366	A1	20050414	US 2003-500140	20030120
PRIORITY APPLN. INFO.:			JP 2002-12103	A 20020121
			WO 2003-JP399	W 20030120

AB Title method comprises (i) a step in which a thermosetting and photocurable coating composition is applied to an object to form a wet coating, (ii) a step in which the wet coating is heated to semicure it, and (iii) a step in which the semicured coating is irradiated with light to cure it. Thus, a composition with solid content 60% comprising 2-hydroxyethyl acrylate homopolymer carbamate ester with isophorone diisocyanate 20, styrene-Me methacrylate-cyclohexyl methacrylate-2-hydroxyethyl methacrylate copolymer 70, Cymel 235 23, dipentaerythritol hexaacrylate 10, Iragacure 819 1.5, Iragacure 184 1.5, Tinuvin 400 1.5, and Tinuvin 144 0.7 parts was applied on a multi-coated steel plate, heated at 140° for 20 min, and irradiated to give a clear top coat with good smooth surface, 60° gloss 95, adhesion, weather resistance, repairability, and curability.

IT 89118-74-1DP, Adipic acid-ethylene glycol-neopentyl glycol-phthalic acid copolymer, hydroxy-containing 475184-35-1P 570396-83-7P, Cyclohexyl methacrylate-2-hydroxyethyl acrylate-2-hydroxyethyl methacrylate-methyl methacrylate-styrene copolymer carbamate ester with isophorone diisocyanate  
 RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)  
 (intermediate; preparation of coating materials for films)

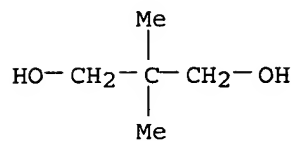
RN 89118-74-1 HCAPLUS

CN 1,2-Benzenedicarboxylic acid, polymer with 2,2-dimethyl-1,3-propanediol,  
 1,2-ethanediol and hexanedioic acid (9CI) (CA INDEX NAME)



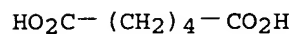
CM 1

CRN 126-30-7  
CMF C5 H12 O2



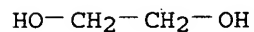
CM 2

CRN 124-04-9  
CMF C6 H10 O4



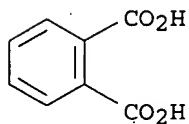
CM 3

CRN 107-21-1  
CMF C2 H6 O2



CM 4

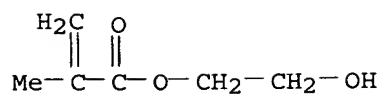
CRN 88-99-3  
CMF C8 H6 O4



RN 475184-35-1 HCAPLUS  
CN 2-Propenoic acid, 2-methyl-, cyclohexyl ester, polymer with  
ethenylbenzene, 2-hydroxyethyl 2-methyl-2-propenoate and methyl  
2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

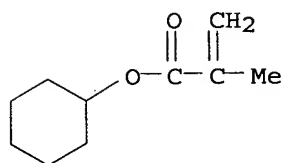
CRN 868-77-9  
CMF C6 H10 O3



CM 2

CRN 101-43-9

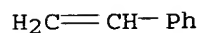
CMF C10 H16 O2



CM 3

CRN 100-42-5

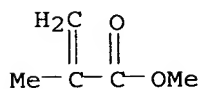
CMF C8 H8



CM 4

CRN 80-62-6

CMF C5 H8 O2



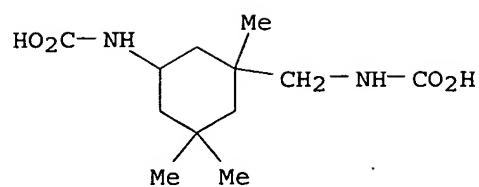
RN 570396-83-7 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, polymer with cyclohexyl 2-methyl-2-propenoate, ethenylbenzene, 2-hydroxyethyl 2-propenoate and methyl 2-methyl-2-propenoate, ester with [3-[(carboxyamino)methyl]-3,5,5-trimethylcyclohexyl]carbamic acid (9CI) (CA INDEX NAME)

CM 1

CRN 52337-42-5

CMF C12 H22 N2 O4



CM 2

CRN 570396-82-6

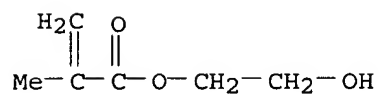
CMF (C10 H16 O2 . C8 H8 . C6 H10 O3 . C5 H8 O3 . C5 H8 O2)x

CCI PMS

CM 3

CRN 868-77-9

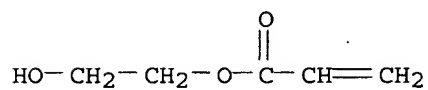
CMF C6 H10 O3



CM 4

CRN 818-61-1

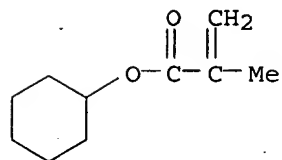
CMF C5 H8 O3



CM 5

CRN 101-43-9

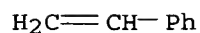
CMF C10 H16 O2



CM 6

CRN 100-42-5

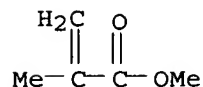
CMF C8 H8



CM 7

CRN 80-62-6

CMF C5 H8 O2



IT 570396-85-9P, Acrylic acid-cyclohexyl methacrylate-methyl methacrylate-**styrene** copolymer ester with glycidyl methacrylate  
 RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation of coating materials for films)

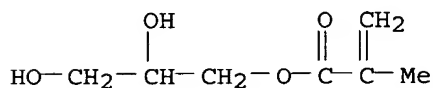
RN 570396-85-9 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, cyclohexyl ester, polymer with ethenylbenzene, methyl 2-methyl-2-propenoate and 2-propenoic acid, 2-hydroxy-3-[(2-methyl-1-oxo-2-propenyl)oxylpropyl ester (9CI) (CA INDEX NAME)

CM 1

CRN 5919-74-4

CMF C7 H12 O4



CM 2

CRN 569685-96-7

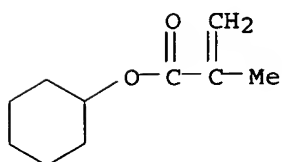
CMF (C10 H16 O2 . C8 H8 . C5 H8 O2 . C3 H4 O2)x

CCI PMS

CM 3

CRN 101-43-9

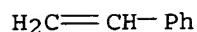
CMF C10 H16 O2



CM 4

CRN 100-42-5

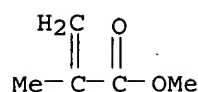
CMF C8 H8



CM 5

CRN 80-62-6

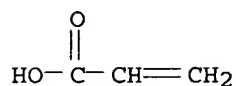
CMF C5 H8 O2



CM 6

CRN 79-10-7

CMF C3 H4 O2



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L29 ANSWER 13 OF 51 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:390081 HCAPLUS

DOCUMENT NUMBER: 138:386978

TITLE: Aqueous ink compositions with good water resistance and pigment dispersibility

INVENTOR(S): Yoshihara, Yoshiji; Omoteda, Mamoru

PATENT ASSIGNEE(S): Kuraray Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

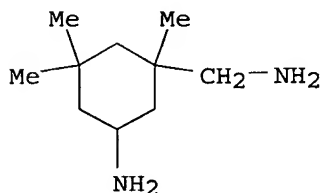
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003147250	A2	20030521	JP 2001-346097	20011112
PRIORITY APPLN. INFO.:			JP 2001-346097	20011112

AB Title compns. contain pigments and block copolymers consisting of polyolefin blocks and 2-100:0-98 mol% COOH-, acid anhydride-, or SO3H-containing vinyl compound-other vinyl compound blocks with the acid groups neutralized by basic compds. with equivalent of  $\geq 0.05$ . An ink containing acrylic acid-1-butene-propene-Et acrylate block copolymer (prepared from

SH-terminated Tafmer XR 110T and acrylic monomers) Na salt, carbon black, and water showed good dispersibility and was printed on various paper to form prints with good appearance, adhesion, and water resistance.

IT 2855-13-2DP, Isophoronediamine, polymers with hydrogenated  
OH-terminated **butadiene** rubber and PTMG and diols and TDI (and epoxy resins)  
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (aqueous inks containing neutralized acrylic olefin block copolymers with water resistance and pigment dispersibility and adhesion to various paper)  
RN 2855-13-2 HCAPLUS  
CN Cyclohexanemethanamine, 5-amino-1,3,3-trimethyl- (9CI) (CA INDEX NAME)



IT 29160-13-2, 1-Butene-propene copolymer  
RL: RCT (Reactant); RACT (Reactant or reagent) (reaction with thio-S-acetic acid, for preparation of block copolymer; aqueous inks containing neutralized acrylic olefin block copolymers with water resistance and pigment dispersibility and adhesion to various paper)  
RN 29160-13-2 HCAPLUS  
CN 1-Butene, polymer with 1-propene (9CI) (CA INDEX NAME)

CM 1

CRN 115-07-1

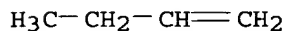
CMF C3 H6



CM 2

CRN 106-98-9

CMF C4 H8

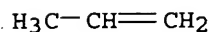


IT 9003-07-0, Noblen MH 8  
RL: RCT (Reactant); RACT (Reactant or reagent) (reaction with thioacetic acid, for preparation of block copolymer; aqueous inks containing neutralized acrylic olefin block copolymers with water resistance and pigment dispersibility and adhesion to various paper)  
RN 9003-07-0 HCAPLUS  
CN 1-Propene, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 115-07-1

CMF C3 H6



L29 ANSWER 14 OF 51 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:369021 HCAPLUS

DOCUMENT NUMBER: 138:355298

TITLE: Curable polyurethane paste compositions as sealing materials for automobiles

INVENTOR(S): Yabuta, Hisashi; Kawakami, Hisato; Yokouchi, Keiichi

PATENT ASSIGNEE(S): Sanyo Chemical Industries, Ltd., Japan; Toyota Motor Corp.

SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003138128	A2	20030514	JP 2001-334679	20011031
PRIORITY APPLN. INFO.:			JP 2001-334679	20011031

OTHER SOURCE(S): MARPAT 138:355298

AB The composition comprises (A) polyurethane microparticles, (B) a plasticizer derived from aromatic monocarboxylic acid monoester, and (C) a filler. Thus, 100 parts polyurethane microparticle prepared from propylene oxide-bisphenol A-terephthalate adduct, MDI and isophoronediamine was mixed with 100 parts polyethylene glycol octylphenyl ether benzoate obtained from polyethylene glycol monooctylphenyl ether and benzoyl chloride, and 100 parts NS 100 (calcium carbonate) and cured, showing viscosity 45,000 cP, breaking strength 40 kg/cm<sup>2</sup> and breaking elongation 210%.

IT 300725-64-8P

RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (microparticles; curable polyurethane paste compns. as sealing materials for automobiles)

RN 300725-64-8 HCAPLUS

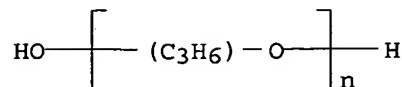
CN Cyclohexanemethanamine, 5-amino-1,3,3-trimethyl-, polymer with  $\alpha$ -hydro- $\omega$ -hydroxypoly[oxy(methyl-1,2-ethanediyl)] and 1,1'-methylenebis[4-isocyanatobenzene], block (9CI) (CA INDEX NAME)

CM 1

CRN 25322-69-4

CMF (C3 H6 O)<sub>n</sub> H2 O

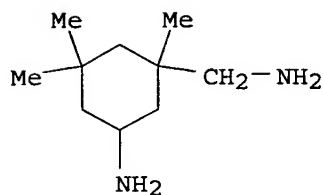
CCI IDS, PMS



CM 2

CRN 2855-13-2

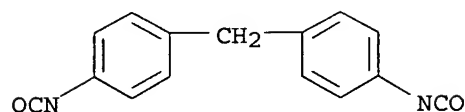
CMF C10 H22 N2



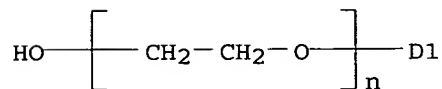
CM 3

CRN 101-68-8

CMF C15 H10 N2 O2



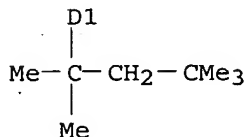
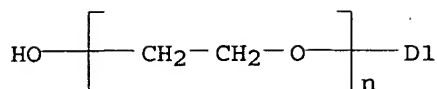
IT 9014-92-0, Polyethylene glycol monododecylphenyl ether  
 9036-19-5, Polyethylene glycol mono-octylphenyl ether  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (preparation of plasticizers in curable polyurethane paste compns.)  
 RN 9014-92-0 HCAPLUS  
 CN Poly(oxy-1,2-ethanediyl),  $\alpha$ -(dodecylphenyl)- $\omega$ -hydroxy- (9CI)  
 (CA INDEX NAME)



Me-(CH<sub>2</sub>)<sub>11</sub>-D1

RN 9036-19-5 HCAPLUS  
 CN Poly(oxy-1,2-ethanediyl),  $\alpha$ -[(1,1,3,3-tetramethylbutyl)phenyl]- $\omega$ -hydroxy- (9CI) (CA INDEX NAME)





L29 ANSWER 15 OF 51 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:366872 HCAPLUS

DOCUMENT NUMBER: 138:355295

TITLE: Curable polyurethane paste compositions as sealing materials with good storage stability and mechanical properties for automobiles

INVENTOR(S): Kawakami, Kazuto; Yabuta, Hisashi; Yokouchi, Keiichi

PATENT ASSIGNEE(S): Sanyo Chemical Industries, Ltd., Japan; Toyota Motor Corp.

SOURCE: Jpn. Kokai Tokkyo Koho, 14 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003138129	A2	20030514	JP 2001-334680	20011031
PRIORITY APPLN. INFO.:			JP 2001-334680	20011031

AB The composition comprises (A) polyurethane microparticles covered with a polyvalent metal salt- or polyvalent metal alkoxide-containing polymer and/or a surfactant, (B) a plasticizer, and (C) a filler. Thus, 100 parts polyurethane microparticle prepared by polymerizing propylene oxide-bisphenol A-terephthalate adduct, MDI and isophoronediamine and covered with acrylic acid-styrene copolymer sodium salt was mixed with di-Bu phthalate 130 and NS 100 (calcium carbonate) 100 parts and applied to a metal plate and cured, showing viscosity 31,000 cP, breaking strength 45 kg/cm<sup>2</sup>, breaking elongation 210% and good storage stability.

IT 54452-17-4, Acrylic acid-styrene copolymer sodium salt

RL: RCT (Reactant); RACT (Reactant or reagent)

(curable polyurethane paste compns. as sealing materials with good storage stability and mech. properties for automobiles)

RN 54452-17-4 HCAPLUS

CN 2-Propenoic acid, polymer with ethenylbenzene, sodium salt (9CI) (CA INDEX NAME)

CM 1

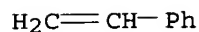
CRN 25085-34-1

CMF (C8 H8 . C3 H4 O2)x  
CCI PMS

CM 2

CRN 100-42-5

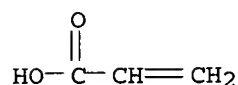
CMF C8 H8



CM 3

CRN 79-10-7

CMF C3 H4 O2



IT 300725-64-8, Isophoronediamine-MDI-polypropylene glycol block copolymer

RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)

(microparticles; curable polyurethane paste compns. as sealing materials with good storage stability and mech. properties for automobiles)

RN 300725-64-8 HCAPLUS

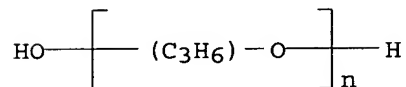
CN Cyclohexanemethanamine, 5-amino-1,3,3-trimethyl-, polymer with  $\alpha$ -hydro- $\omega$ -hydroxypoly[oxy(methyl-1,2-ethanediyl)] and 1,1'-methylenebis[4-isocyanatobenzene], block (9CI) (CA INDEX NAME)

CM 1

CRN 25322-69-4

CMF (C3 H6 O)n H2 O

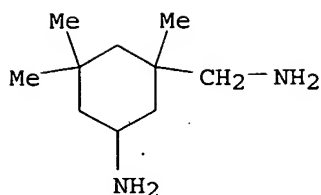
CCI IDS, PMS



CM 2

CRN 2855-13-2

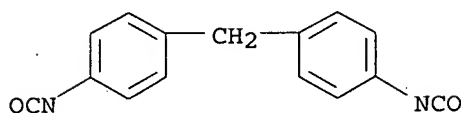
CMF C10 H22 N2



CM 3

CRN 101-68-8

CMF C15 H10 N2 O2



L29 ANSWER 16 OF 51 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2002:765986 HCAPLUS

DOCUMENT NUMBER: 137:280726

TITLE: Epoxy-based oil-resistant cathodic electrodeposition coating composition containing crosslinked polymeric particles for automobiles

INVENTOR(S): Morichika, Kazuo; Kawanami, Toshitaka; Sakamoto, Hiroyuki

PATENT ASSIGNEE(S): Nippon Paint Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002294173	A2	20021009	JP 2001-98547	20010330
PRIORITY APPLN. INFO.:			JP 2001-98547	20010330

AB Title composition comprises (A) a resin composition containing sulfonium groups and

propargyl groups, and (B) 3-20 wt% of crosslinked resin particles obtained by emulsion polymerizing  $\alpha,\beta$ -ethylenically unsatd. monomers using ammonium group-containing polyacrylate as a emulsifier. Thus, an ammonium group-containing acrylic polymer was prepared by reacting N,N-dimethylaminoethanol with Bu methacrylate-2-ethylhexyl methacrylate-glycidyl methacrylate-2-hydroxyethyl methacrylate copolymer. Then, a crosslinked polymeric particles were prepared by polymerizing Bu methacrylate, glycidyl methacrylate, Me methacrylate, neo-pentyl glycol dimethacrylate, and styrene in the presence of the obtained ammonium group-containing acrylic polymer emulsifier. Addnl., a resin composition was prepared by reacting Epo Tohto YDCN 701 100.0 g, propargyl alc. 23.6 g, and di-Me benzylamine 0.3 g at 105° for 3 h, reacting with copper acetylacetonate 2.5 g at 95° for 1.5 h, then reacting with 1-(2-hydroxyethylthio)-2,3-propanediol 10.6 g in glacial acetic acid 4.7 g.

and water 7.0 g at 75° for another 6 h. The obtained resin composition was mixed the crosslinked particles and other ingredients, and diluted with water to 15 wt% to give a coating for stainless steel, exhibiting excellent adhesion, rust prevention, and appearance.

IT 466696-53-7P, Butyl methacrylate-2-Ethylhexyl methacrylate-glycidyl methacrylate-2-hydroxyethyl methacrylate copolymer compound with (isophorone diisocyanate compound with triethylene glycol monomethyl ether and N,N-dimethylaminoethanol)

RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PRP (Properties); PREP (Preparation); USES (Uses)

(emulsifier; preparation of ammonium group-containing polyacrylate as emulsifier

for polymerization of crosslinked particles used in cathodic electrodeposition

coating composition)

RN 466696-53-7 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with 2-ethylhexyl 2-methyl-2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate and oxiranylmethyl 2-methyl-2-propenoate, compd. with [3-[(carboxyamino)methyl]-3,5,5-trimethylcyclohexyl]carbamic acid 2-(dimethylamino)ethyl 2-[2-(2-methoxyethoxy)ethoxy]ethyl ester (9CI) (CA INDEX NAME)

CM 1

CRN 466696-50-4

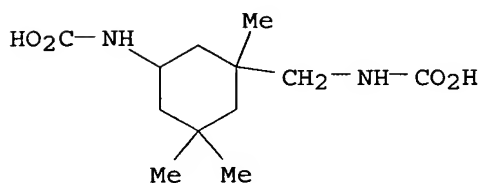
CMF C23 H45 N3 O7

CCI IDS

CM 2

CRN 52337-42-5

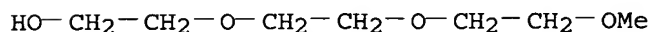
CMF C12 H22 N2 O4



CM 3

CRN 112-35-6

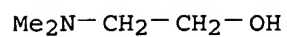
CMF C7 H16 O4



CM 4

CRN 108-01-0

CMF C4 H11 N O



CM 5

CRN 443762-01-4

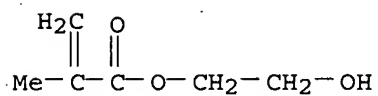
CMF (C12 H22 O2 . C8 H14 O2 . C7 H10 O3 . C6 H10 O3)x

CCI PMS

CM 6

CRN 868-77-9

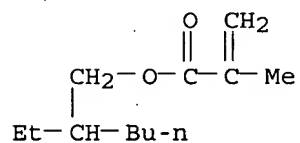
CMF C6 H10 O3



CM 7

CRN 688-84-6

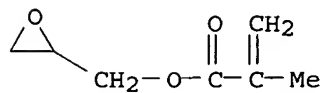
CMF C12 H22 O2



CM 8

CRN 106-91-2

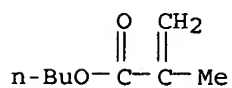
CMF C7 H10 O3



CM 9

CRN 97-88-1

CMF C8 H14 O2



IT 466696-50-4P, Isophorone diisocyanate compound with triethylene glycol monomethyl ether and N,N-dimethylaminoethanol  
 RL: IMF (Industrial manufacture); PRP (Properties); RCT (Reactant)  
 ; PREP (Preparation); RACT (Reactant or reagent)  
 (quarternizing agent; preparation of ammonium group-containing polyacrylate

as emulsifier for polymerization of crosslinked particles used in cathodic electrodeposition coating composition)

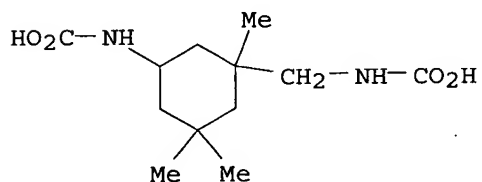
RN 466696-50-4 HCAPLUS

CN Carbamic acid, [3-[(carboxyamino)methyl]-3,5,5-trimethylcyclohexyl]-, 2-(dimethylamino)ethyl 2-[2-(2-methoxyethoxy)ethoxy]ethyl ester (9CI) (CA INDEX NAME)

CM 1

CRN 52337-42-5

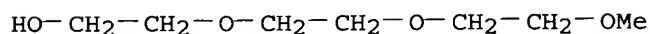
CMF C12 H22 N2 O4



CM 2

CRN 112-35-6

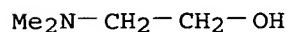
CMF C7 H16 O4



CM 3

CRN 108-01-0

CMF C4 H11 N O



L29 ANSWER 17 OF 51 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2002:748354 HCAPLUS

DOCUMENT NUMBER: 137:286433

TITLE: Light-sensitive positive-working coating composition for pattern formation in manufacturing electric circuits

INVENTOR(S): Yamanaka, Kazuo; Miyagawa, Kenji

PATENT ASSIGNEE(S): Kansai Paint Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

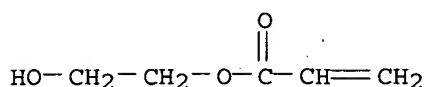
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002287345	A2	20021003	JP 2001-86564	20010326
PRIORITY APPLN. INFO.:			JP 2001-86564	20010326

AB The title composition contains polymers, a compound having average  $\geq 2$  carboxyl groups, and a photoacid generator, wherein the polymer has a vinyl ether group attached a urethane bond and a tert-Bu group. The composition is sensitive also visible light and provides precise patterns.

IT 818-61-1  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (light-sensitive pos.-working coating composition for pattern formation in manufacturing elec. circuits)

RN 818-61-1 HCAPLUS

CN 2-Propenoic acid, 2-hydroxyethyl ester (9CI) (CA INDEX NAME)



IT 466684-00-4P, Styrene-methyl methacrylate-butyl acrylate-tert-butyl acrylate-2-Hydroxyethyl methacrylate-isophorone diisocyanate adduct (1:1)-4-(vinylloxy)butanol copolymer  
 RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (polymer; light-sensitive pos.-working coating composition for pattern formation in manufacturing elec. circuits)

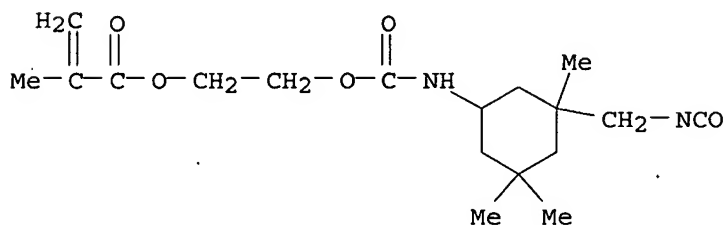
RN 466684-00-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[[[3-(isocyanatomethyl)-3,5,5-trimethylcyclohexyl]amino]carbonyl]oxyethyl ester, polymer with butyl 2-propenoate, 1,1-dimethylethyl 2-propenoate, ethenylbenzene, 4-(ethenylloxy)-1-butanol and methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 61994-31-8

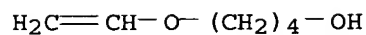
CMF C18 H28 N2 O5



CM 2

CRN 17832-28-9

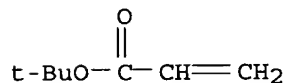
CMF C6 H12 O2



CM 3

CRN 1663-39-4

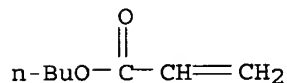
CMF C7 H12 O2



CM 4

CRN 141-32-2

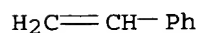
CMF C7 H12 O2



CM 5

CRN 100-42-5

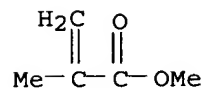
CMF C8 H8



CM 6

CRN 80-62-6

CMF C5 H8 O2



L29 ANSWER 18 OF 51 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2002:514447 HCAPLUS

DOCUMENT NUMBER: 137:80344

TITLE: Phosphoric ester-modified aqueous coatings showing excellent water and freezing-thawing resistance

INVENTOR(S): Fujita, Naohiro

PATENT ASSIGNEE(S): Asahi Denka Kogyo K. K., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.



CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002194236	A2	20020710	JP 2000-397018	20001227
PRIORITY APPLN. INFO.:			JP 2000-397018	20001227

AB The coatings, showing excellent storage stability and good adhesion to substrates, contain phosphoric esters having COCH<sub>2</sub>COR<sub>3</sub> or COCH:CR<sub>3</sub>NHR<sub>2</sub>Si(OR<sub>1</sub>)<sub>3</sub> (R<sub>1</sub> = H, C<sub>1</sub>-4 alkyl; R<sub>2</sub> = C<sub>1</sub>-4 alkylene; R<sub>3</sub> = C<sub>1</sub>-8 alkyl or aryl) and phosphate P-OH linkages. Thus, an aqueous coating comprising 30%-solid a reaction product of H<sub>2</sub>PO<sub>4</sub>, glycidol, ADEKA resin EP 4100 (bisphenol A epoxy resin), Et acetoacetate, and NH<sub>4</sub>OH 70, 45%-solid Polysol AP 4750 (an acrylic emulsion) 30, and adipic acid dihydrazide 6 parts was sprayed on a Ca silicate board and coated with an acrylic topcoat to give a specimen showing cross-cut adhesion test 100/100 and no peeling in a freezing-thawing cycle test.

IT 441045-18-7P, Adeka resin EP 4100-isophorone diamine-polyethylene glycol bisphenol A epoxy resin ether copolymer

RL: IMF (Industrial manufacture); RCT (Reactant); TEM (Technical or engineered material use); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(crosslinking agents; aqueous coatings comprising acylacetato-modified epoxy resin phosphates showing good adhesion and storage stability)

RN 441045-18-7 HCAPLUS

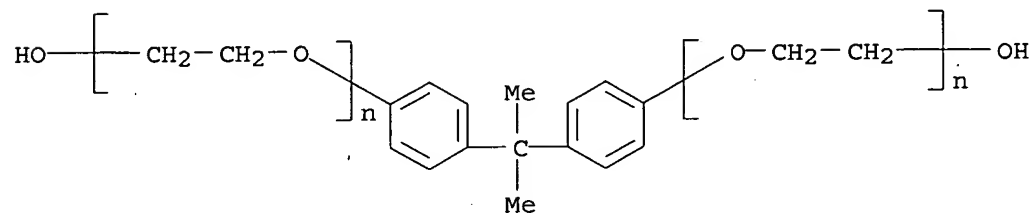
CN Cyclohexanemethanamine, 5-amino-1,3,3-trimethyl-, polymer with (chloromethyl)oxirane, 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[oxirane] and  $\alpha,\alpha'$ -[(1-methylethylidene)di-4,1-phenylene]bis[ $\omega$ -hydroxypoly(oxy-1,2-ethanediyl)] (9CI) (CA INDEX NAME)

CM 1.

CRN 32492-61-8

CMF (C<sub>2</sub> H<sub>4</sub> O)<sub>n</sub> (C<sub>2</sub> H<sub>4</sub> O)<sub>n</sub> C<sub>15</sub> H<sub>16</sub> O<sub>2</sub>

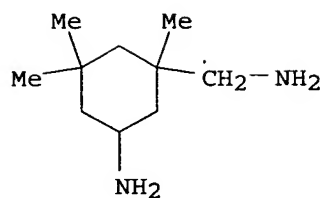
CCI PMS



CM 2

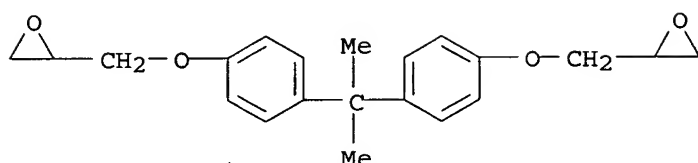
CRN 2855-13-2

CMF C<sub>10</sub> H<sub>22</sub> N<sub>2</sub>



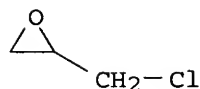
CM 3

CRN 1675-54-3  
CMF C21 H24 O4



CM 4

CRN 106-89-8  
CMF C3 H5 Cl O



L29 ANSWER 19 OF 51 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2002:445625 HCAPLUS

DOCUMENT NUMBER: 137:169854

TITLE: Oligomeric benzoin photoinitiators

AUTHOR(S): Kizilcan, Nilgun; Akar, Ahmet

CORPORATE SOURCE: Faculty of Science, Department of Chemistry, Istanbul Technical University, Istanbul, 80626, Turk.

SOURCE: Journal of Applied Polymer Science (2002), 85(3), 500-508

CODEN: JAPNAB; ISSN: 0021-8995

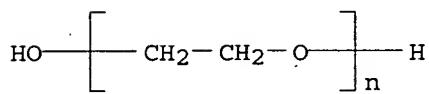
PUBLISHER: John Wiley & Sons, Inc.

DOCUMENT TYPE: Journal

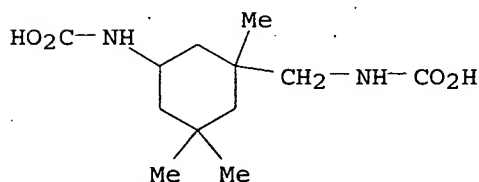
LANGUAGE: English

AB Novel oligomeric photoinitiators were synthesized by reacting benzoin with isophorone diisocyanate-terminated oligomers of dihydroxy-terminated depolymn. products of polyethylene terephthalate (PET). PET was depolymd. by ethylene glycol (EG), hexylene glycol (HG), polyethylene glycol 10 000 (PEG), and  $\alpha,\omega$ -dihydroxy poly(di-Me siloxane)s (PDMS). Oligomeric photoinitiators were used as free radical initiators for polymerization of styrene and acrylonitrile. Formation of block copolymers was illustrated by several characterization methods such as FTIR, <sup>1</sup>H-NMR, DSC, and GPC.

IT 25322-68-3, Polyethylene glycol  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (depolymer. agent; synthesis of depolymer. polyethylene  
 terephthalate-based oligomeric benzoin photoinitiators and their  
 application in acrylonitrile or **styrene** block copolymer  
 synthesis)  
 RN 25322-68-3 HCAPLUS  
 CN Poly(oxy-1,2-ethanediyl),  $\alpha$ -hydro- $\omega$ -hydroxy- (9CI) (CA INDEX  
 NAME)



IT 448218-42-6P, Ethylene glycol-hydroxy-terminated  
 poly(dimethylsilanediol)-terephthalic acid copolymer, tris(urethane) with  
 isophorone diisocyanate and benzoin 448218-43-7P,  
 Ethylene glycol-hexamethylene glycol-terephthalic acid copolymer,  
 tris(urethane) with isophorone diisocyanate and benzoin  
 448218-44-8P, Ethylene glycol-polyethylene  
 glycol-terephthalic acid copolymer, tris(urethane) with isophorone  
 diisocyanate and benzoin 448218-45-9P, Ethylene  
 glycol-terephthalic acid copolymer, tris(urethane) with isophorone  
 diisocyanate and benzoin  
 RL: CAT (Catalyst use); SPN (Synthetic preparation); PREP (Preparation);  
 USES (Uses)  
 (photoinitiator; synthesis of depolymer. polyethylene  
 terephthalate-based oligomeric benzoin photoinitiators and their  
 application in acrylonitrile or **styrene** block copolymer  
 synthesis)  
 RN 448218-42-6 HCAPLUS  
 CN 1,4-Benzenedicarboxylic acid, polymer with 1,2-ethanediol and  
 $\alpha$ -hydro- $\omega$ -hydroxypoly[oxy(dimethylsilylene)], ester with  
 [3-[(carboxyamino)methyl]-3,5,5-trimethylcyclohexyl]carbamic acid and  
 [3-[(carboxyamino)methyl]-3,5,5-trimethylcyclohexyl]carbamic acid  
 mono(2-oxo-1,2-diphenylethyl) ester (2:1:2), block (9CI) (CA INDEX NAME)  
 CM 1  
 CRN 52337-42-5  
 CMF C12 H22 N2 O4

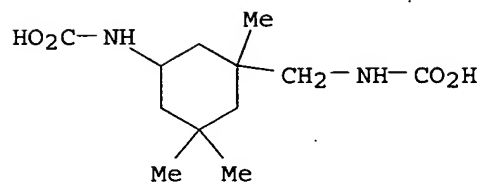


CM 2  
 CRN 448218-41-5  
 CMF C26 H32 N2 O5  
 CCI IDS

CM 3

CRN 52337-42-5

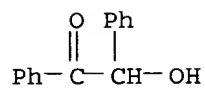
CMF C12 H22 N2 O4



CM 4

CRN 119-53-9

CMF C14 H12 O2



CM 5

CRN 448218-40-4

CMF (C8 H6 O4 . C2 H6 O2 . (C2 H6 O Si)n H2 O)x

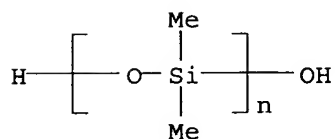
CCI PMS

CM 6

CRN 31692-79-2

CMF (C2 H6 O Si)n H2 O

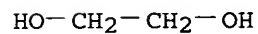
CCI PMS



CM 7

CRN 107-21-1

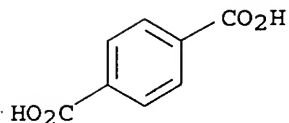
CMF C2 H6 O2



CM 8

CRN 100-21-0

CMF C8 H6 O4



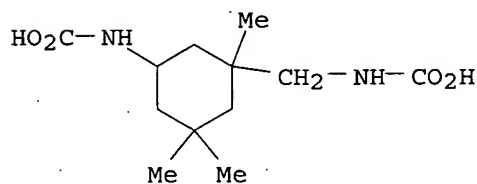
RN 448218-43-7 HCAPLUS

CN 1,4-Benzenedicarboxylic acid, polymer with 1,2-ethanediol and 1,6-hexanediol, ester with [3-[(carboxyamino)methyl]-3,5,5-trimethylcyclohexyl]carbamic acid and [3-[(carboxyamino)methyl]-3,5,5-trimethylcyclohexyl]carbamic acid mono(2-oxo-1,2-diphenylethyl) ester (2:1:2) (9CI) (CA INDEX NAME)

CM 1 .

CRN 52337-42-5

CMF C12 H22 N2 O4



CM 2

CRN 448218-41-5

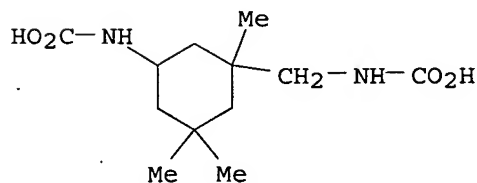
CMF C26 H32 N2 O5

CCI IDS

CM 3

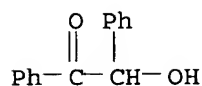
CRN 52337-42-5

CMF C12 H22 N2 O4



CM 4

CRN 119-53-9  
CMF C14 H12 O2

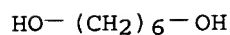


CM 5

CRN 32441-30-8  
CMF (C8 H6 O4 . C6 H14 O2 . C2 H6 O2)x  
CCI PMS

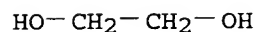
CM 6

CRN 629-11-8  
CMF C6 H14 O2



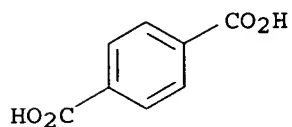
CM 7

CRN 107-21-1  
CMF C2 H6 O2



CM 8

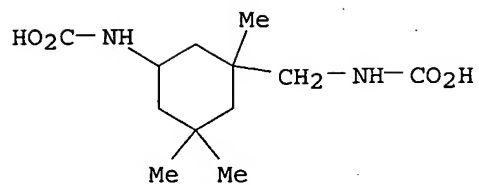
CRN 100-21-0  
CMF C8 H6 O4



RN 448218-44-8 HCAPLUS  
CN 1,4-Benzenedicarboxylic acid, polymer with 1,2-ethanediol and  
α-hydro-ω-hydroxypoly(oxy-1,2-ethanediyl), ester with  
[3-[(carboxyamino)methyl]-3,5,5-trimethylcyclohexyl]carbamic acid and  
[3-[(carboxyamino)methyl]-3,5,5-trimethylcyclohexyl]carbamic acid  
mono(2-oxo-1,2-diphenylethyl) ester (2:1:2), block (9CI) (CA INDEX NAME)

CM 1

CRN 52337-42-5  
CMF C12 H22 N2 O4

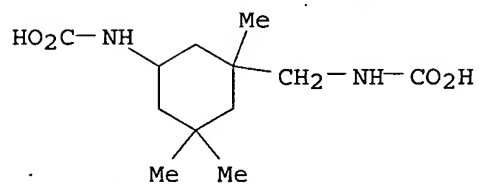


CM 2

CRN 448218-41-5  
CMF C26 H32 N2 O5  
CCI IDS

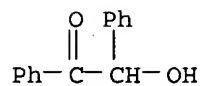
CM 3

CRN 52337-42-5  
CMF C12 H22 N2 O4



CM 4

CRN 119-53-9  
CMF C14 H12 O2

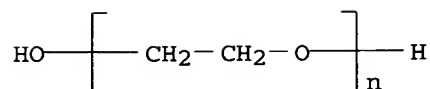


CM 5

CRN 108188-72-3  
CMF (C8 H6 O4 . C2 H6 O2 . (C2 H4 O)n H2 O)x  
CCI PMS

CM 6

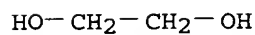
CRN 25322-68-3  
CMF (C2 H4 O)n H2 O  
CCI PMS



CM 7

CRN 107-21-1

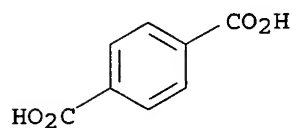
CMF C2 H6 O2



CM 8

CRN 100-21-0

CMF C8 H6 O4



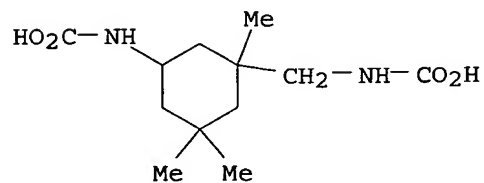
RN 448218-45-9 HCAPLUS

CN 1,4-Benzenedicarboxylic acid, polymer with 1,2-ethanediol, ester with [3-[(carboxyamino)methyl]-3,5,5-trimethylcyclohexyl]carbamic acid and [3-[(carboxyamino)methyl]-3,5,5-trimethylcyclohexyl]carbamic acid mono(2-oxo-1,2-diphenylethyl) ester (2:1:2) (9CI) (CA INDEX NAME)

CM 1

CRN 52337-42-5

CMF C12 H22 N2 O4



CM 2

CRN 448218-41-5

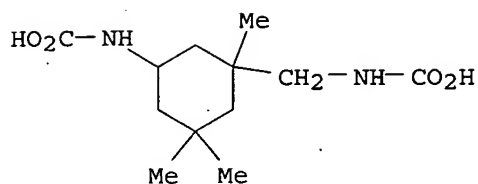
CMF C26 H32 N2 O5

CCI IDS

CM 3

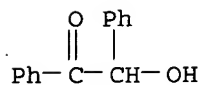


CRN 52337-42-5  
CMF C12 H22 N2 O4



CM 4

CRN 119-53-9  
CMF C14 H12 O2

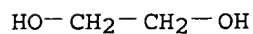


CM 5

CRN 9003-68-3  
CMF (C8 H6 O4 . C2 H6 O2)x  
CCI PMS

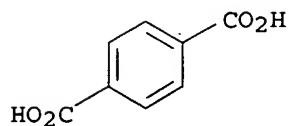
CM 6

CRN 107-21-1  
CMF C2 H6 O2



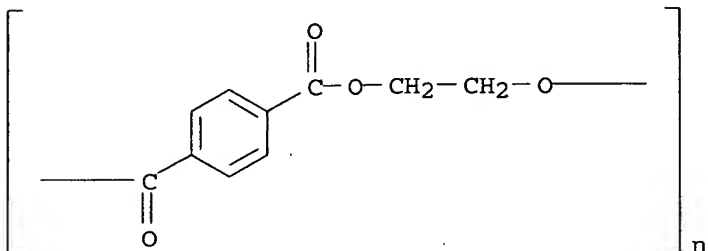
CM 7

CRN 100-21-0  
CMF C8 H6 O4



IT 25038-59-9, Polyethylene terephthalate, reactions  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(synthesis of depolymd. polyethylene terephthalate-based oligomeric  
benzoin photoinitiators and their application in acrylonitrile or  
styrene block copolymer synthesis)

RN 25038-59-9 HCAPLUS  
 CN Poly(oxy-1,2-ethanediylloxycarbonyl-1,4-phenylenecarbonyl) (9CI) (CA INDEX NAME)



REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L29 ANSWER 20 OF 51 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2002:306844 HCAPLUS

DOCUMENT NUMBER: 136:311383

TITLE: Production methods for alcohol-soluble urethane resins and printing inks

INVENTOR(S): Takanashi, Hirotosug; Muramatsu, Ichiro; Motomura, Masatoshi

PATENT ASSIGNEE(S): Dainippon Ink and Chemicals, Inc., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002121250	A2	20020423	JP 2000-317798	20001018
PRIORITY APPLN. INFO.:			JP 2000-317798	20001018

AB Linear urethane prepolymers containing >70 mol% terminal isocyanate groups bonded to secondary and/or tertiary aliphatic carbons reacted in alcs. with diamines to prepare alc.-soluble polyurethanes. Thus, polypropylene glycol-tetramethylxylylene diisocyanate copolymer was prepared and treated with isophorone diamine and Bu2NH in iso-PrOH to prepare a polyurethane.

IT 408332-63-8P, Polypropylene glycol-tetramethylxylylene diisocyanate copolymer 412032-64-5P, Polypropylene glycol-polypropylene glycol bisphenol A ether-tetramethylxylylene diisocyanate copolymer 412032-68-9P, Adipic acid-methylcyclohexane diisocyanate-propylene glycol copolymer

RL: IMF (Industrial manufacture); RCT (Reactant); PREP

(Preparation); RACT (Reactant or reagent)

(alc.-soluble urethane resins for printing inks)

RN 408332-63-8 HCAPLUS

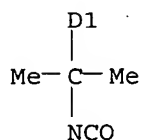
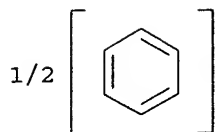
CN Poly[oxy(methyl-1,2-ethanediyl)],  $\alpha$ -hydro- $\omega$ -hydroxy-, polymer with bis(1-isocyanato-1-methylethyl)benzene (9CI) (CA INDEX NAME)

CM 1

CRN 58067-42-8

CMF C14 H16 N2 O2

CCI IDS

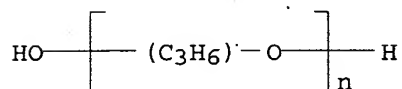


CM 2

CRN 25322-69-4

CMF (C3 H6 O)<sub>n</sub> H2 O

CCI IDS, PMS



RN 412032-64-5 HCAPLUS

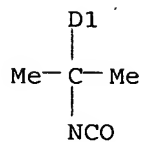
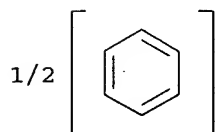
CN Poly[oxy(methyl-1,2-ethanediyl)], α,α'-[(1-methylethylidene)di-4,1-phenylene]bis[ω-hydroxy-, polymer with bis(1-isocyanato-1-methylethyl)benzene and α-hydro-ω-hydroxypoly[oxy(methyl-1,2-ethanediyl)] (9CI) (CA INDEX NAME)

CM 1

CRN 58067-42-8

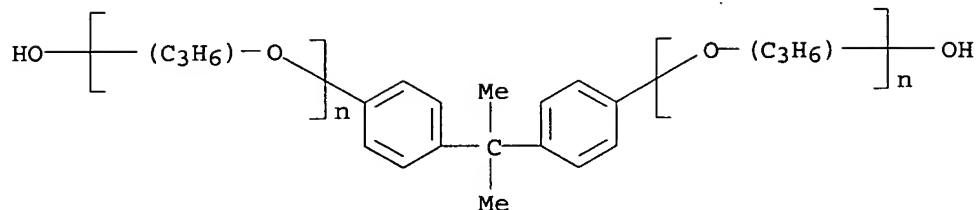
CMF C14 H16 N2 O2

CCI IDS



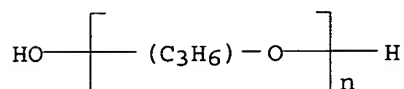
CM 2

CRN 37353-75-6  
 CMF (C3 H6 O)n (C3 H6 O)n C15 H16 O2  
 CCI IDS, PMS



CM 3

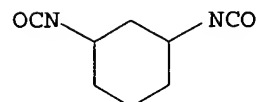
CRN 25322-69-4  
 CMF (C3 H6 O)n H2 O  
 CCI IDS, PMS



RN 412032-68-9 HCAPLUS  
 CN Hexanedioic acid, polymer with 1,3-diisocyanatomethylcyclohexane and 1,2-propanediol (9CI) (CA INDEX NAME)

CM 1

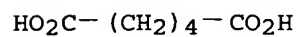
CRN 25567-57-1  
 CMF C9 H12 N2 O2  
 CCI IDS



D1-Me

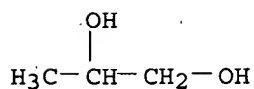
CM 2

CRN 124-04-9  
 CMF C6 H10 O4



CM 3

CRN 57-55-6  
CMF C3 H8 O2

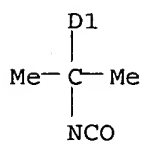
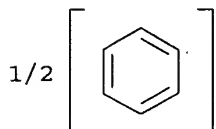


IT 412032-63-4P, Isophorone diamine-polypropylene glycol-tetramethylxylylene diisocyanate copolymer 412032-69-0P, Adipic acid-isophorone diamine-methylcyclohexane diisocyanate-propylene glycol copolymer  
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(alc.-soluble urethane resins for printing inks)

RN 412032-63-4 HCAPLUS  
CN Cyclohexanemethanamine, 5-amino-1,3,3-trimethyl-, polymer with bis(1-isocyanato-1-methylethyl)benzene and  $\alpha$ -hydro- $\omega$ -hydroxypoly[oxy(methyl-1,2-ethanediyl)] (9CI) (CA INDEX NAME)

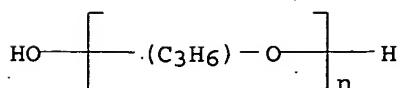
CM 1

CRN 58067-42-8  
CMF C14 H16 N2 O2  
CCI IDS



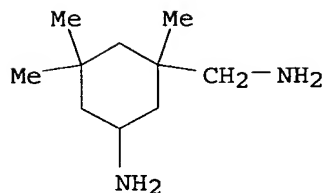
CM 2

CRN 25322-69-4  
CMF (C3 H6 O)<sub>n</sub> H2 O  
CCI IDS, PMS



CM 3

CRN 2855-13-2  
CMF C10 H22 N2

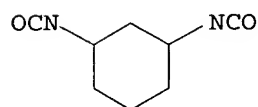


RN 412032-69-0 HCAPLUS

CN Hexanedioic acid, polymer with 5-amino-1,3,3-trimethylcyclohexanemethanamine, 1,3-diisocyanatomethylcyclohexane and 1,2-propanediol (9CI) (CA INDEX NAME)

CM 1

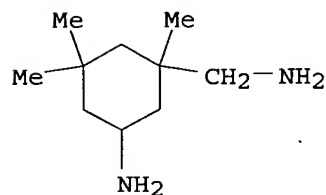
CRN 25567-57-1  
CMF C9 H12 N2 O2  
CCI IDS



D1-Me

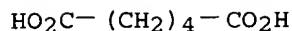
CM 2

CRN 2855-13-2  
CMF C10 H22 N2



CM 3

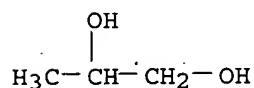
CRN 124-04-9  
CMF C6 H10 O4



CM 4

CRN 57-55-6

CMF C3 H8 O2



L29 ANSWER 21 OF 51 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2002:21717 HCAPLUS

DOCUMENT NUMBER: 136:70981

TITLE: Method for manufacture of polyurethane adhesives by using recycled polyester-polyols from waste PET polyester plastics

INVENTOR(S): Morikawa, Yukihiko; Kobayashi, Takanori; Higashikubo, Ichiro; Sasahara, Toshiaki

PATENT ASSIGNEE(S): Nippon Polyurethane Industry Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 2002003815	A2	20020109	JP 2000-190579	20000626
PRIORITY APPLN. INFO.:			JP 2000-190579	20000626

AB The adhesives are manufactured by using hydroxy-containing components derived from

the condensation products of polybasic acids with the alcoholysis products of waste PET polyester plastics by low-mol.-weight polyols, common polyisocyanates and optionally chain extenders. Thus, heating flaky PET chips 265.0 with neopentyl glycol 371.4, ethylene glycol 9.3 and tetra-Bu titanate 1.0 at 190° for 6 h, adding adipic acid 470.2 g to the resulting clear liquid, slowly heating to 200° where the distillation of water ceased, and heating again to 230° while reducing the pressure to 0.4 kPa gave a polyester-polyol (A) as viscous liquid with OH number 56.5 mg-KOH/g, and acid number 0.72 mg-KOH/g. Dissolving the A 455.5 in EtOAc 215 at 60°, mixing with IPDI 44.5 and dioctyltin dilaurate 0.1 at 70° for 5 h, and diluting the resulting product with EtOAc 285 g gave a polyurethane solution with solids content 50%, 1000 g of which was combined with Coronate HL (polyisocyanate) 100 and EtOAc 2200 g to give an adhesive with tough bonding strength.

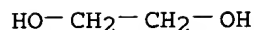
IT 107-21-1, Ethylene glycol, reactions

RL: RCT (Reactant); RACT (Reactant or reagent)

(alcoholysis reagent; method for manufacture of polyurethane adhesives by using recycled polyester-polyols from waste PET polyester plastics)

RN 107-21-1 HCAPLUS

CN 1,2-Ethanediol (9CI) (CA INDEX NAME)



IT 385371-48-2P, Adipic acid;Coronate HL;ethylene glycol;isophoronediamine;IPDI;neopentyl glycol;terephthalic acid copolymer  
 RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (method for manufacture of polyurethane adhesives by using recycled polyester-polyols from waste PET polyester plastics)

RN 385371-48-2 HCAPLUS

CN 1,4-Benzenedicarboxylic acid, polymer with 5-amino-1,3,3-trimethylcyclohexanemethanamine, Coronate HL, 2,2-dimethyl-1,3-propanediol, 1,2-ethanediol, hexanedioic acid and 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane (9CI) (CA INDEX NAME)

CM 1

CRN 37293-38-2

CMF Unspecified

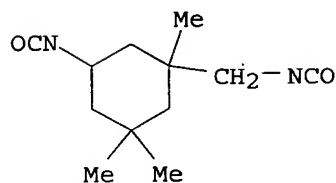
CCI PMS, MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 2

CRN 4098-71-9

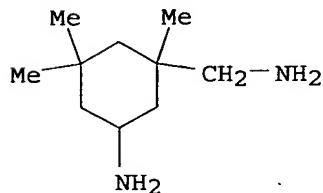
CMF C12 H18 N2 O2



CM 3

CRN 2855-13-2

CMF C10 H22 N2

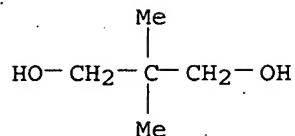


CM 4

CRN 126-30-7

CMF C5 H12 O2

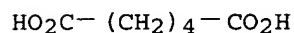




CM 5

CRN 124-04-9

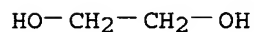
CMF C6 H10 O4



CM 6

CRN 107-21-1

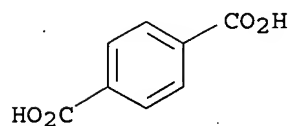
CMF C2 H6 O2



CM 7

CRN 100-21-0

CMF C8 H6 O4



IT 27923-68-8P, **Ethylene** glycol-isophthalic acid-neopentyl glycol-terephthalic acid copolymer 40374-60-5P, Adipic acid-**ethylene** glycol-neopentyl glycol-terephthalic acid copolymer  
 RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)  
 (polyester polyols; method for manufacture of polyurethane adhesives by using recycled polyester-polyols from waste PET polyester plastics)

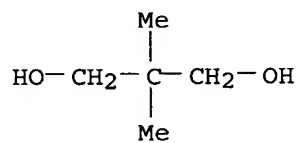
RN 27923-68-8 HCAPLUS

CN 1,3-Benzenedicarboxylic acid, polymer with 1,4-benzenedicarboxylic acid, 2,2-dimethyl-1,3-propanediol and 1,2-ethanediol (9CI) (CA INDEX NAME)

CM 1

CRN 126-30-7

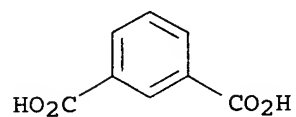
CMF C5 H12 O2



CM 2

CRN 121-91-5

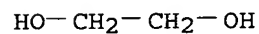
CMF C8 H6 O4



CM 3

CRN 107-21-1

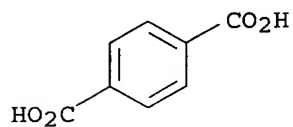
CMF C2 H6 O2



CM 4

CRN 100-21-0

CMF C8 H6 O4



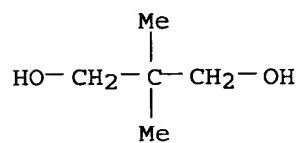
RN 40374-60-5 HCAPLUS

CN 1,4-Benzenedicarboxylic acid, polymer with 2,2-dimethyl-1,3-propanediol,  
1,2-ethanediol and hexanedioic acid (9CI) (CA INDEX NAME)

CM 1

CRN 126-30-7

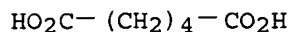
CMF C5 H12 O2



CM 2

CRN 124-04-9

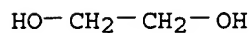
CMF C6 H10 O4



CM 3

CRN 107-21-1

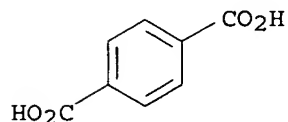
CMF C2 H6 O2



CM 4

CRN 100-21-0

CMF C8 H6 O4



L29 ANSWER 22 OF 51 HCAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2001:505403 HCAPLUS  
 DOCUMENT NUMBER: 135:93621  
 TITLE: Hot-melt adhesive composition and its use  
 INVENTOR(S): Jahrsetz, Heike; Kleineberg, Olaf; Pfeiffer, Heinz-Peter  
 PATENT ASSIGNEE(S): DuPont Performance Coatings GmbH and Co. KG, Germany  
 SOURCE: Ger. Offen., 6 pp.  
 CODEN: GWXXBX  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19963585	A1	20010712	DE 1999-19963585	19991229
PRIORITY APPLN. INFO.:			DE 1999-19963585	19991229

AB Hot melt reactive adhesive compns. are based on (a) isocyanate group-containing prepolymers obtained by reaction of at least partially crystalline, linear polyesters in mixture with linear polyethers and optionally amorphous polyesters with diisocyanates, whereby the prepolymers have a number-average mol. weight of 700-6000 and the reactive isocyanate groups are 50-100% blocked, and (b) diamines and/or their epoxy adducts, as well as

one or more conventional additives. These polyurethane-type adhesives are characterized by improved storage stability and are suitable for a variety of substrates. In an example, an adhesive was prepared from adipic acid-1,6-hexanediol copolymer, adipic acid-diethylene glycol-ethylene glycol-1,6-hexanediol-isophthalic acid-neopentyl glycol copolymer, 4,4'-MDI, poly(tetrahydrofuran), 1,4-butanediol, caprolactam, and (as component b) isophoronediamine.

IT 349458-99-7P

RL: IMF (Industrial manufacture); RCT (Reactant); PREP

(Preparation); RACT (Reactant or reagent)

(prepolymer; production of polyurethane-based hot-melt reactive adhesives from)

RN 349458-99-7 HCAPLUS

CN 1,3-Benzenedicarboxylic acid, polymer with 2,2-dimethyl-1,3-propanediol, 1,2-ethanediol, hexanedioic acid, 1,6-hexanediol and 2,2'-oxybis[ethanol] (9CI) (CA INDEX NAME)

CM 1

CRN 629-11-8

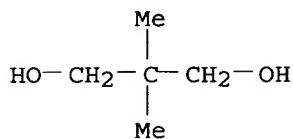
CMF C6 H14 O2

HO-(CH<sub>2</sub>)<sub>6</sub>-OH

CM 2

CRN 126-30-7

CMF C5 H12 O2



CM 3

CRN 124-04-9

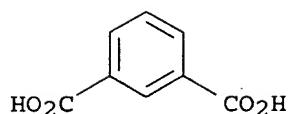
CMF C6 H10 O4

HO<sub>2</sub>C-(CH<sub>2</sub>)<sub>4</sub>-CO<sub>2</sub>H

CM 4

CRN 121-91-5

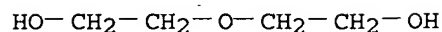
CMF C8 H6 O4



CM 5

CRN 111-46-6

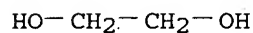
CMF C4 H10 O3



CM 6

CRN 107-21-1

CMF C2 H6 O2



IT 349459-00-3P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(production of polyurethane-based hot-melt reactive adhesives from)

RN 349459-00-3 HCAPLUS

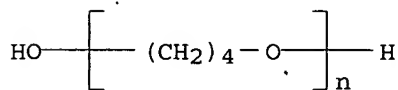
CN 1,3-Benzenedicarboxylic acid, polymer with 5-amino-1,3,3-trimethylcyclohexanemethanamine, 1,4-butanediol, 2,2-dimethyl-1,3-propanediol, 1,2-ethanediol, hexahydro-2H-azepin-2-one, hexanedioic acid, 1,6-hexanediol,  $\alpha$ -hydro- $\omega$ -hydroxypoly(oxy-1,4-butanediyl), 1,1'-methylenebis[4-isocyanatobenzene] and 2,2'-oxybis[ethanol], block (9CI) (CA INDEX NAME)

CM 1

CRN 25190-06-1

CMF (C4 H8 O)<sub>n</sub> H2 O

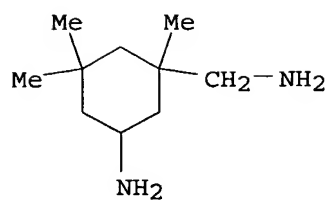
CCI PMS



CM 2

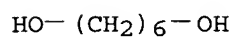
CRN 2855-13-2

CMF C10 H22 N2



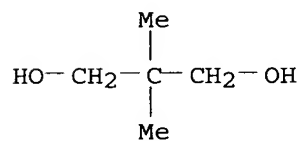
CM 3

CRN 629-11-8  
CMF C6 H14 O2



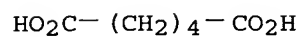
CM 4

CRN 126-30-7  
CMF C5 H12 O2



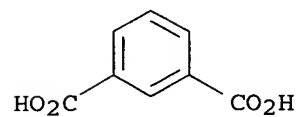
CM 5

CRN 124-04-9  
CMF C6 H10 O4



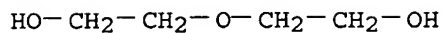
CM 6

CRN 121-91-5  
CMF C8 H6 O4



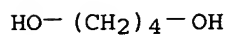
CM 7

CRN 111-46-6  
CMF C4 H10 O3



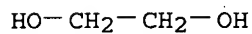
CM 8

CRN 110-63-4  
CMF C4 H10 O2



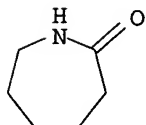
CM 9

CRN 107-21-1  
CMF C2 H6 O2



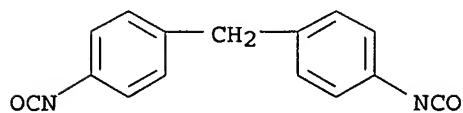
CM 10

CRN 105-60-2  
CMF C6 H11 N O



CM 11

CRN 101-68-8  
CMF C15 H10 N2 O2



L29 ANSWER 23 OF 51 HCAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 2001:461050 HCAPLUS  
DOCUMENT NUMBER: 135:62340  
TITLE: Thermosetting polymer compositions, their cured products, and antireflective laminates

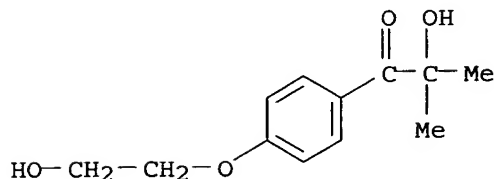
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	JP 2001172309	A2	20010626	JP 1999-361628	19991220
PRIORITY APPLN. INFO.:				JP 1999-361628	19991220
AB	The comps. contain F-containing polymeric polymerization initiators and (meth)acryloyl-containing compds. Thus, a composition containing 100 parts polymer prepared from Et vinyl ether-hexafluoropropylene-hydroxyethyl vinyl ether-perfluoro(Pr vinyl ether) copolymer and 4-(2-hydroxyethoxy)phenyl 2-hydroxy-2-Pr ketone-IPDI adduct and 20 parts trimethylolpropane triacrylate was applied on an acrylic board and cured by UV irradiation to give a film showing reflectance 2.1% and good abrasion and solvent resistance.				
IT	345961-47-9P 345961-72-0P RL: CAT (Catalyst use); IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (thermosetting polymer comps. for antireflective films with good abrasion and solvent resistance)				
RN	345961-47-9 HCAPLUS				
CN	Ethanol, 2-(ethenyloxy)-, polymer with ethoxyethene, 1,1,1,2,2,3,3-heptafluoro-3-[(trifluoroethenyl)oxy]propane and 1,1,2,3,3,3-hexafluoro-1-propene, ester with [3-[(carboxyamino)methyl]-3,5,5-trimethylcyclohexyl]carbamic acid mono[2-[4-(2-hydroxy-2-methyl-1-oxopropyl)phenoxy]ethyl] ester (9CI) (CA INDEX NAME)				

CM 1

CRN 345961-46-8  
CMF C24 H36 N2 O7  
CCI IDS

CM 2

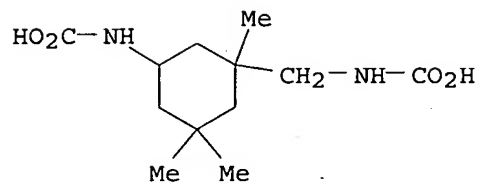
CRN 106797-53-9  
CMF C12 H16 O4



CM 3



CRN 52337-42-5  
CMF C12 H22 N2 O4

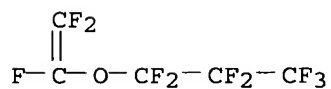


CM 4

CRN 345960-56-7  
CMF (C5 F10 O . C4 H8 O2 . C4 H8 O . C3 F6)x  
CCI PMS

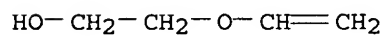
CM 5

CRN 1623-05-8  
CMF C5 F10 O



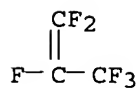
CM 6

CRN 764-48-7  
CMF C4 H8 O2



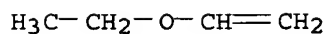
CM 7

CRN 116-15-4  
CMF C3 F6



CM 8

CRN 109-92-2  
CMF C4 H8 O



RN 345961-72-0 HCAPLUS

CN Silanediol, dimethyl-, polymer with 2-(ethenyloxy)ethanol, ethoxyethene, 1,1,1,2,2,3,3-heptafluoro-3-[(trifluoroethenyl)oxy]propane, 1,1,2,3,3,3-hexafluoro-1-propene and  $\alpha$ -[1-[(nonylphenoxy)methyl]-2-(2-propenyloxy)ethyl]- $\omega$ -hydroxypoly(oxy-1,2-ethanediyl), ester with [3-[(carboxyamino)methyl]-3,5,5-trimethylcyclohexyl]carbamic acid mono[2-[4-(2-hydroxy-2-methyl-1-oxopropyl)phenoxy]ethyl] ester (9CI) (CA INDEX NAME)

CM 1

CRN 345961-46-8

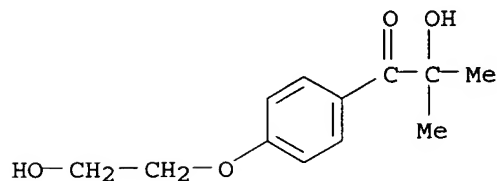
CMF C24 H36 N2 O7

CCI IDS

CM 2

CRN 106797-53-9

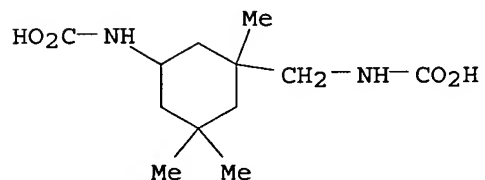
CMF C12 H16 O4



CM 3

CRN 52337-42-5

CMF C12 H22 N2 O4



CM 4

CRN 305819-87-8

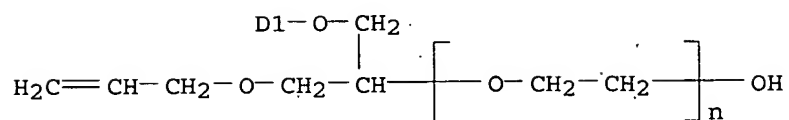
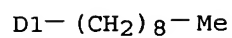
CMF (C5 F10 O . C4 H8 O2 . C4 H8 O . C3 F6 . C2 H8 O2 Si . (C2 H4 O)n C21 H34 O3)x

CCI PMS

CM 5

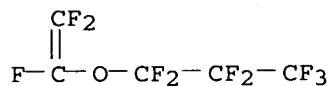
CRN 111144-60-6

CMF (C2 H4 O)n C2i H34 O3  
CCI IDS, PMS



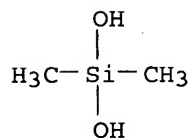
CM 6

CRN 1623-05-8  
CMF C5 F10 O



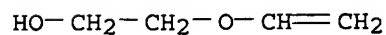
CM 7.

CRN 1066-42-8  
CMF C2. H8 O2 Si



CM 8

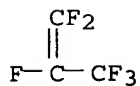
CRN 764-48-7  
CMF C4 H8 O2



CM 9

CRN 116-15-4

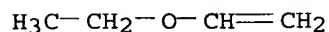
CMF C3 F6



CM 10

CRN 109-92-2

CMF C4 H8 O



IT 305819-87-8P 345960-56-7P

RL: IMF (Industrial manufacture); RCT (Reactant); PREP

(Preparation); RACT (Reactant or reagent)

(thermosetting polymer compns. for antireflective films with good abrasion and solvent resistance)

RN 305819-87-8 HCAPLUS

CN Silanediol, dimethyl-, polymer with 2-(ethenyloxy)ethanol, ethoxyethene, 1,1,1,2,2,3,3-heptafluoro-3-[(trifluoroethenyl)oxy]propane, 1,1,2,3,3,3-hexafluoro-1-propene and  $\alpha$ -[1-[(nonylphenoxy)methyl]-2-(2-propenyloxy)ethyl]- $\omega$ -hydroxypoly(oxy-1,2-ethanediyl), block, graft (9CI) (CA INDEX NAME)

CM 1

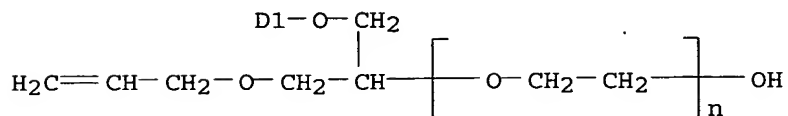
CRN 111144-60-6

CMF (C2 H4 O)<sub>n</sub> C21 H34 O3

CCI IDS, PMS



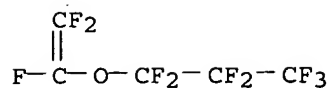
D1-(CH<sub>2</sub>)<sub>8</sub>-Me



CM 2

CRN 1623-05-8

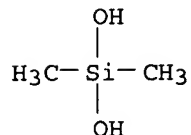
CMF C5 F10 O



CM 3

CRN 1066-42-8

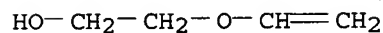
CMF C2 H8 O2 Si



CM 4

CRN 764-48-7

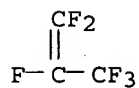
CMF C4 H8 O2



CM 5

CRN 116-15-4

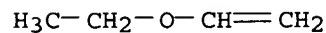
CMF C3 F6



CM 6

CRN 109-92-2

CMF C4 H8 O



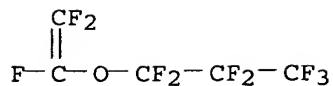
RN 345960-56-7 HCAPLUS

CN Ethanol, 2-(ethenyloxy)-, polymer with ethoxyethene, 1,1,1,2,2,3,3-heptafluoro-3-[(trifluoroethenyl)oxy]propane and 1,1,2,3,3,3-hexafluoro-1-propene (9CI) (CA INDEX NAME)

CM 1

CRN 1623-05-8

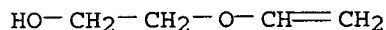
CMF C5 F10 O



CM 2

CRN 764-48-7

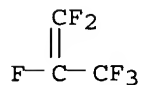
CMF C4 H8 O2



CM 3

CRN 116-15-4

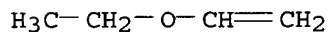
CMF C3 F6



CM 4

CRN 109-92-2

CMF C4 H8 O



L29 ANSWER 24 OF 51 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2000:659704 HCAPLUS

DOCUMENT NUMBER: 133:253531

TITLE: Anisotropically electrically conductive adhesives and electronic equipments therewith

INVENTOR(S): Ito, Hiroshi; Kawada, Masakazu

PATENT ASSIGNEE(S): Sumitomo Bakelite Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 14 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 2000256641	A2	20000919	JP 1999-57118	19990304
JP 3503740	B2	20040308		

PRIORITY APPLN. INFO.: JP 1999-57118 19990304

AB Adhesives contain urethane acrylates, organic peroxides, thermoplastic

elastomers, phosphate esters, epoxysilane coupling agents, and elec. conductive granules. Thus, an adhesive contained 50% 1:2 hexamethylene diisocyanate-pentaerythritol triacrylate adduct 340, 1,1,3,3-tetramethylbutyl peroxy-2-ethylhexanoate 5, 20% acrylonitrile-butadiene-methacrylic acid copolymer 500, caprolactone-modified (meth)acryloyloxyethyl acid phosphate 50,  $\beta$ -(3,4-epoxycyclohexyl)ethyltrimethoxysilane 1.6, and Au-Ni-plated polystyrene granules 7.0 parts.

IT 294211-36-2P

RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(adhesives containing urethane acrylates and peroxides and thermoplastic elastomers and phosphate esters and coupling agents and elec. conductors for electronic equipments)

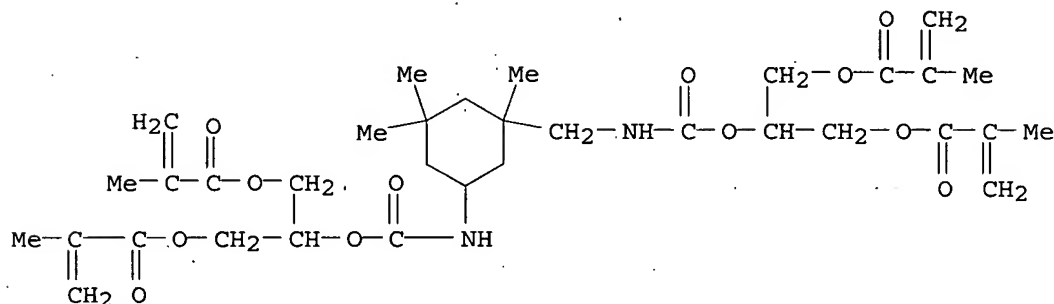
RN 294211-36-2 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with 1,3-butadiene,  $\omega, \omega'$ -[phosphinicobis(oxy)]bis[ $\alpha$ -[2-[(1-oxo-2-propenyl)oxy]ethyl]poly[oxy(1-oxo-1,6-hexanediyl)]]], 2-propenenitrile, trimethoxy[2-(7-oxabicyclo[4.1.0]hept-3-yl)ethyl]silane and 2-[[[[[1,3,3-trimethyl-5-[[[2-[(2-methyl-1-oxo-2-propenyl)oxy]-1-[[[(2-methyl-1-oxo-2-propenyl)oxy]methyl]ethoxy]carbonyl]amino]cyclohexyl]methyl]amino]carbonyl]oxy]-1,3-propanediyl bis(2-methyl-2-propenoate) (9CI) (CA INDEX NAME)

CM 1

CRN 294211-35-1

CMF C34 H50 N2 O12



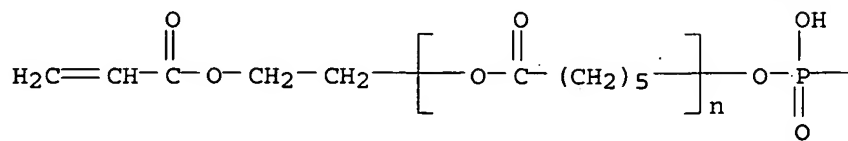
CM 2

CRN 294211-29-3

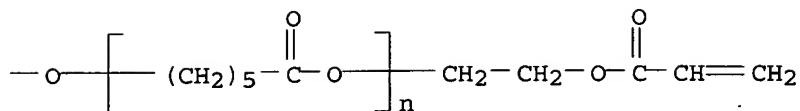
CMF (C6 H10 O2)<sub>n</sub> (C6 H10 O2)<sub>n</sub> C10 H15 O8 P

CCI PMS

PAGE 1-A



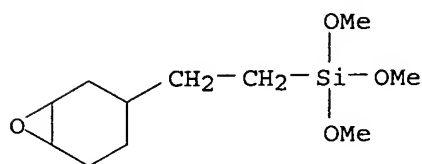
PAGE 1-B



CM 3

CRN 3388-04-3

CMF C11 H22 O4 Si



CM 4

CRN 107-13-1

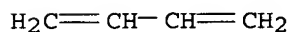
CMF C3 H3 N



CM 5

CRN 106-99-0

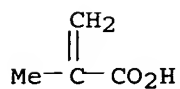
CMF C4 H6



CM 6

CRN 79-41-4

CMF C4 H6 O2



IT 9003-55-8

RL: RCT (Reactant); RACT (Reactant or reagent)

(styrene-butadiene rubber, epoxidized; adhesives

containing urethane acrylates and peroxides and thermoplastic elastomers



and phosphate esters and coupling agents and elec. conductors for electronic equipments)

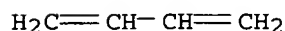
RN 9003-55-8 HCAPLUS

CN Benzene, ethenyl-, polymer with 1,3-butadiene (9CI) (CA INDEX NAME)

CM 1

CRN 106-99-0

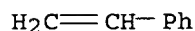
CMF C4 H6



CM 2

CRN 100-42-5

CMF C8 H8



L29 ANSWER 25 OF 51 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2000:502209 HCAPLUS

DOCUMENT NUMBER: 133:322529

TITLE: Epoxide resins modified with maleinized liquid polybutadienes Krasol LBM

AUTHOR(S): Vecera, Miroslav; Pokorny, Jiri

CORPORATE SOURCE: University Pardubice, Czech Rep.

SOURCE: Plasty a Kaucuk (2000), 37(6), 168-172

CODEN: PLKCAS; ISSN: 0322-7340

PUBLISHER: POLENG

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The mech. properties of modified Bisphenol A epoxide resins (ER) using maleate-terminated liquid polybutadienes Krasol LBM have been determined. The optimum conditions of synthesis of modified ER have been found. A series of liquid polybutadienes Krasol LBM differing in mol. weight, viscosity, way of stabilization, and structure have been examined as potential modification components for ER's. Mech. properties have also been determined for the modified products prepared after hardening with a series of crosslinking agents. The liquid polybutadienes Krasol LBM have proved to be efficient modification components for ER's.

IT 9003-17-2

RL: PRP (Properties); RCT (Reactant); RACT (Reactant or reagent)

(butadiene rubber, hydroxy-terminated, maleates, liquid, Krasol LBM-type; mech. properties of epoxide resins modified with maleate-terminated liquid polybutadienes and crosslinked)

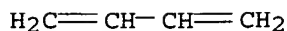
RN 9003-17-2 HCAPLUS

CN 1,3-Butadiene, homopolymer (9CI) (CA INDEX NAME)

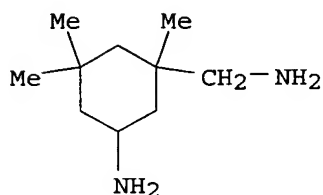
CM 1

CRN 106-99-0

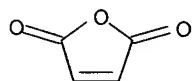
CMF C4 H6



IT 2855-13-2DP, Isophorone diamine, reaction products with esterified  
butadiene rubber and epoxy resin  
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
(mech. properties of epoxide resins modified with maleate-terminated  
liquid polybutadienes and crosslinked)  
RN 2855-13-2 HCAPLUS  
CN Cyclohexanemethanamine, 5-amino-1,3,3-trimethyl- (9CI) (CA INDEX NAME)



IT 108-31-6DP, Maleic anhydride, reaction products with  
hydroxy-terminated butadiene rubber  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP  
(Preparation); RACT (Reactant or reagent)  
(mech. properties of epoxide resins modified with maleate-terminated  
liquid polybutadienes and crosslinked) -  
RN 108-31-6 HCAPLUS  
CN 2,5-Furandione (9CI) (CA INDEX NAME)



REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L29 ANSWER 26 OF 51 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1999:101106 HCAPLUS

DOCUMENT NUMBER: 130:197139

TITLE: Biodegradable poly(lactic acid ester amide) with  
controlled heat resistance and strength and its  
manufacturing method

INVENTOR(S): Takahashi, Akio

PATENT ASSIGNEE(S): Dainippon Ink and Chemicals, Inc., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11035680	A2	19990209	JP 1997-199963	19970725
PRIORITY APPLN. INFO.:			JP 1997-199963	19970725

AB The poly(lactic acid ester amide) comprises a polyamide unit, a polyester

unit, a poly(lactic acid) unit, and a polylactone unit at specified ratio. Condensation polymerization of sebacic acid 113.1, ethylene glycol 44.6, and sebacic acid hexamethylenediamine salt 76.32 g, stirring the resulting polyesteramide 16.0, D,L-lactide 8.0, and  $\epsilon$ -caprolactone 8.0 g in 30 mL PhMe, and heating with 52 mg Sn octanoate at 170° for 5 h gave a polymer with Mn 38,500, good transparency and heat and storage stability.

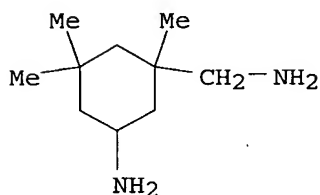
IT 187943-35-7P, Sebacic acid-ethylene glycol-isophoronediamine copolymer 220719-21-1P 220765-29-7P, Sebacic acid-ethylene glycol-sebacic acid hexamethylenediamine salt copolymer 220765-46-8P, Sebacic acid-ethylene glycol-bis(4-aminocyclohexyl)methane copolymer  
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)  
(manufacture of biodegradable poly(lactic acid ester amide) with controlled heat resistance and strength)

RN 187943-35-7 HCAPLUS  
CN Decanedioic acid, polymer with 5-amino-1,3,3-trimethylcyclohexanemethanamine and 1,2-ethanediol (9CI) (CA INDEX NAME)

CM 1

CRN 2855-13-2

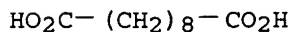
CMF C10 H22 N2



CM 2

CRN 111-20-6

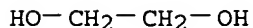
CMF C10 H18 O4



CM 3

CRN 107-21-1

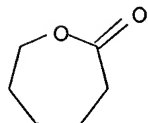
CMF C2 H6 O2



RN 220719-21-1 HCAPLUS  
CN Decanedioic acid, polymer with 1,2-ethanediol, 1,6-hexanediamine decanedioate (1:1) and 2-oxepanone (9CI) (CA INDEX NAME)

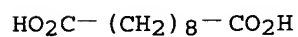
CM 1

CRN 502-44-3  
CMF C6 H10 O2



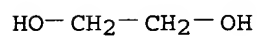
CM 2

CRN 111-20-6  
CMF C10 H18 O4



CM 3

CRN 107-21-1  
CMF C2 H6 O2

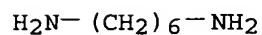


CM 4

CRN 6422-99-7  
CMF C10 H18 O4 . C6 H16 N2

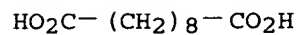
CM 5

CRN 124-09-4  
CMF C6 H16 N2



CM 6

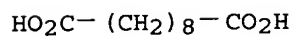
CRN 111-20-6  
CMF C10 H18 O4



RN 220765-29-7 HCAPLUS  
CN Decanedioic acid, polymer with 1,2-ethanediol and 1,6-hexanediamine  
decanedioate (1:1) (9CI) (CA INDEX NAME)

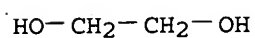
CM 1

CRN 111-20-6  
CMF C10 H18 O4



CM 2

CRN 107-21-1  
CMF C2 H6 O2

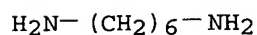


CM 3

CRN 6422-99-7  
CMF C10 H18 O4 . C6 H16 N2

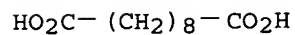
CM 4

CRN 124-09-4  
CMF C6 H16 N2



CM 5

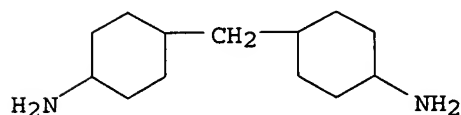
CRN 111-20-6  
CMF C10 H18 O4



RN 220765-46-8 HCAPLUS  
CN Decanedioic acid, polymer with 1,2-ethanediol and 4,4'-methylenebis[cyclohexanamine] (9CI) (CA INDEX NAME)

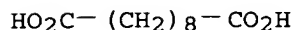
CM 1

CRN 1761-71-3  
CMF C13 H26 N2



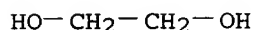
CM 2

CRN 111-20-6  
CMF C10 H18 O4



CM 3

CRN 107-21-1  
CMF C2 H6 O2



L29 ANSWER 27 OF 51 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1997:731775 HCAPLUS

DOCUMENT NUMBER: 128:36070

TITLE: Water-based self-emulsified polyurethane dispersions and their manufacture and use as binders for inks with good storage stability

INVENTOR(S): Ohashi, Masato; Yasuda, Hideki

PATENT ASSIGNEE(S): Toyo Ink Mfg. Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09291245	A2	19971111	JP 1996-107449	19960426
PRIORITY APPLN. INFO.:			JP 1996-107449	19960426

AB The dispersions are obtained by mixing (A) an organic solution of a polyurethane

resin bearing (optionally substituted) aziridinyl groups with (B) an organic solution of a polyurethane resin bearing carboxyl groups partially neutralized by basic compds. not react with aziridinyl groups at A/B weight ratio of 99-1:1-99, removing the organic solvents from the mixture and adding water to proper concentration Thus, an A type solution was prepared from a poly(3-methyl-1,5-pentane adipate) diol (I)-IPDI prepolymer, isophoronediamine and pentaerythritol tri-β-aziridinylpropionate in MEK and acetone, and a B type solution was prepared from an ammonium salt of I-polyethylene glycol-2,2-dimethylolpropionic acid-IPDI prepolymer and isophoronediamine in MEK and acetone. Mixing A and B, removing MEK-acetone azeotropic mixture, and adding water gave a dispersion with good storage stability and adhesion to various plastic surfaces when used as ink binder.

IT 199466-76-7P

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(reactive part of bicomponent water-based self-emulsified polyurethane

dispersions)

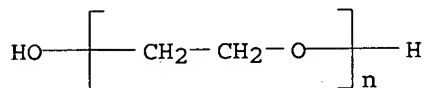
RN 199466-76-7 HCAPLUS  
 CN Hexanedioic acid, polymer with 5-amino-1,3,3-trimethylcyclohexanemethanamine,  $\alpha$ -hydro- $\omega$ -hydroxypoly(oxy-1,2-ethanediyl), 3-hydroxy-2-(hydroxymethyl)-2-methylpropanoic acid, 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane and 3-methyl-1,5-pentanediol, block, ammonium salt (9CI) (CA INDEX NAME)

CM 1

CRN 199466-75-6  
 CMF (C12 H18 N2 O2 . C10 H22 N2 . C6 H14 O2 . C6 H10 O4 . C5 H10 O4 . (C2 H4 O)n H2 O)x  
 CCI PMS

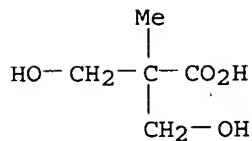
CM 2

CRN 25322-68-3  
 CMF (C2 H4 O)n H2 O  
 CCI PMS



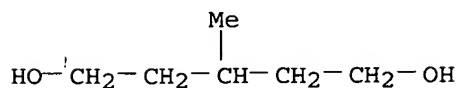
CM 3

CRN 4767-03-7  
 CMF C5 H10 O4



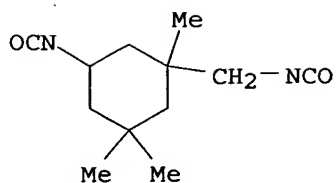
CM 4

CRN 4457-71-0  
 CMF C6 H14 O2



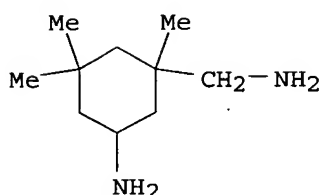
CM 5

CRN 4098-71-9  
 CMF C12 H18 N2 O2



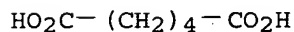
CM 6

CRN 2855-13-2  
CMF C10 H22 N2



CM 7

CRN 124-04-9  
CMF C6 H10 O4



L29 ANSWER 28 OF 51 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1997:123907 HCAPLUS

DOCUMENT NUMBER: 126:132730

TITLE: Coating compositions for low-polarity substrates

INVENTOR(S): Ootsuka, Yoshihiro; Oshino, Yasuhiro

PATENT ASSIGNEE(S): Daicel Chem, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 08311393	A2	19961126	JP 1995-145657	19950519
PRIORITY APPLN. INFO.:			JP 1995-145657	19950519

AB The compns., useful for coatings, adhesives, binders, pressure-sensitive adhesives, etc., comprise (A) epoxidized block copolymers, (B) organic compds. (number-average mol. weight 150-150,000) containing epoxy-reactive groups with ratio of A/(A + B) 1/100-99/100, (C) 0-10 parts (vs. 100 parts A + B) epoxy ring-opening accelerators, and (D) solvents. Thus, a composition containing



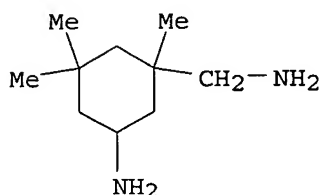
epoxidized styrene-butadiene block copolymer, 1,6-hexanediol-polytetramethylene glycol-isophorone diisocyanate copolymer, PPh<sub>3</sub>, and solvents was applied on a polypropylene sheet to give primers showing good adhesion, and good resistance to impact, gasoline, water, and heat.

IT 2855-13-2DP, Isophoronediamine, polymers with partially hydrogenated epoxidized **butadiene-styrene** block copolymer

RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(coating comps. containing epoxidized **butadiene** block copolymers for low-polarity substrates)

RN 2855-13-2 HCAPLUS

CN Cyclohexanemethanamine, 5-amino-1,3,3-trimethyl- (9CI) (CA INDEX NAME)



L29 ANSWER 29 OF 51 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1997:61090 HCAPLUS

DOCUMENT NUMBER: 126:111104

TITLE: Polymerizable desensitizing ink for copying paper and its preparation

INVENTOR(S): Tsukahara, Hirokazu

PATENT ASSIGNEE(S): Mitsubishi Paper Mills Ltd, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.  
CODEN: JKXXAF

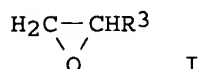
DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 08282097	A2	19961029	JP 1995-87060	19950412
PRIORITY APPLN. INFO.:			JP 1995-87060	19950412
OTHER SOURCE(S):	MARPAT 126:111104			
GI				



AB The desensitizing agent for acid-developable image-forming material is prepared by the following steps; (1) addition polymerizing  $\geq 1$  alkylene oxide I ( $R_3 = H$ , lower alkyl) with an organic **polyamine** compound  $R_2HNR_1NH_2$  ( $R_1 =$  linear, branched, or **cyclic aliphatic hydrocarbon** which may have tertiary amine group in the chain;  $R_2 =$  aliphatic hydrocarbon) having  $\geq 2$  primary and/or secondary amine groups at the terminals,

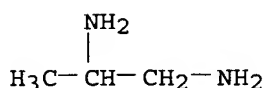
and (2) esterifying  $\geq 1$  OH group of the polyalkylene glycol terminals to form unsatd. carboxylic acid esters. In the above-mentioned esterification,  $\geq 1$  OH group at the polyalkylene glycol terminals of the compound is reacted with an alkali metal or an alkali metal hydride in an ether solvent to form alkali metal oxides, then reacted with  $\geq 1$  unsatd. carboxylic acid halide to form esters. The obtained desensitizing agent is also claimed. Migration of the desensitizing agent is prevented.

IT 78-90-0, 1,2-Diaminopropane 106-88-7, 1,2-Butylene oxide

RL: RCT (Reactant); RACT (Reactant or reagent)  
(preparation of polymerizable desensitizing ink)

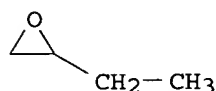
RN 78-90-0 HCAPLUS

CN 1,2-Propanediamine (7CI, 8CI, 9CI) (CA INDEX NAME)



RN 106-88-7 HCAPLUS

CN Oxirane, ethyl- (9CI) (CA INDEX NAME)



L29 ANSWER 30 OF 51 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1997:48642 HCAPLUS

DOCUMENT NUMBER: 126:75662

TITLE: Aqueous polyurethane resins containing aziridinyl and carboxyl groups and their manufacture

INVENTOR(S): Oohashi, Masato; Takano, Masumi

PATENT ASSIGNEE(S): Toyo Ink Mfg Co, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 14 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 08283378	A2	19961029	JP 1995-89115	19950414
JP 3669002	B2	20050706		

PRIORITY APPLN. INFO.: JP 1995-89115 19950414

AB One-liquid polyurethane resins with storage stability are manufactured by the reaction of a polyurethane resin containing aziridinyl group and prepared in an organic medium with a polyurethane resin containing carboxyl group in a ratio of

99:1 to 1-99 in an aqueous medium in which the carboxy-containing polymer is dissolved or dispersed. The polyurethane resins are useful in various fields, especially in printing inks. Thus 354.6 parts of a solution comprising Me

Et ketone and a polymers produced by the reaction of poly(3-methyl-1,5-pentane diadipate)diol 400, isophorone diisocyanate 66.7, isophoronediamine 14.4, and tetramethylol tri- $\beta$ -aziridinylpropionate 17.1 parts and 500 parts of an aqueous solution containing a polymer made from

poly(3-methyl-1,5-pentane diadipate)diol 130.9, polyethylene glycol 15.2, 2,2-dimethylolpropionic acid 29.4, isophorone diisocyanate 97.4, and isophoronediamine 26.6 parts were mixed and reacted to give a polyurethane which was formulated into an ink and tested for stability, printing quality, adhesion, water resistance, laminate strength, and boil retort property.

IT 9045-05-0DP, reaction products with aziridinyll group-containing compds. 185306-94-9P 185306-97-2P

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(aqueous polyurethane resins containing aziridinyll and carboxyl groups and their manufacture)

RN 9045-05-0 HCAPLUS

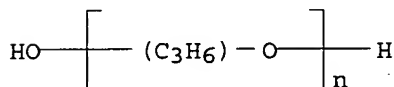
CN Cyclohexanemethanamine, 5-amino-1,3,3-trimethyl-, polymer with  $\alpha$ -hydro- $\omega$ -hydroxypoly[oxy(methyl-1,2-ethanediyl)] and 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane (9CI) (CA INDEX NAME)

CM 1

CRN 25322-69-4

CMF (C3 H6 O)<sub>n</sub> H2 O

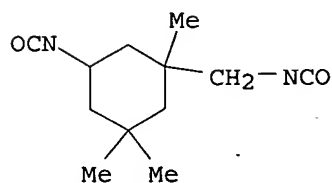
CCI IDS, PMS



CM 2

CRN 4098-71-9

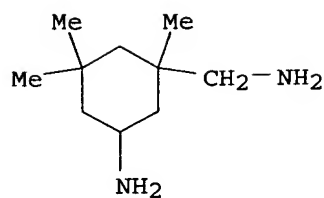
CMF C12 H18 N2 O2



CM 3

CRN 2855-13-2

CMF C10 H22 N2



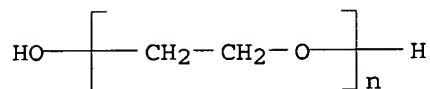
RN 185306-94-9 HCAPLUS  
 CN Hexanedioic acid, polymer with 5-amino-1,3,3-trimethylcyclohexanemethanamine,  $\alpha$ -hydro- $\omega$ -hydroxypoly(oxy-1,2-ethanediyl), 3-hydroxy-2-(hydroxymethyl)-2-methylpropanoic acid, 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane and 3-methyl-1,5-pentanediol, ammonium salt (9CI) (CA INDEX NAME)

CM 1

CRN 185052-59-9  
 CMF (C12 H18 N2 O2 . C10 H22 N2 . C6 H14 O2 . C6 H10 O4 . C5 H10 O4 . (C2 H4 O)n H2 O)x  
 CCI PMS

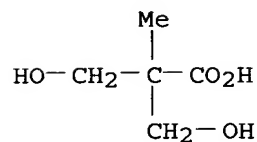
CM 2

CRN 25322-68-3  
 CMF (C2 H4 O)n H2 O  
 CCI PMS



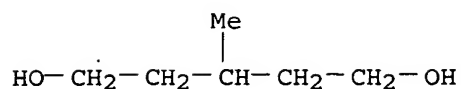
CM 3

CRN 4767-03-7  
 CMF C5 H10 O4



CM 4

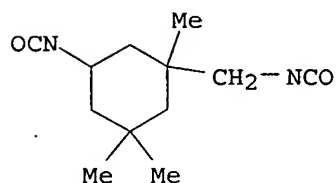
CRN 4457-71-0  
 CMF C6 H14 O2



CM 5

CRN 4098-71-9

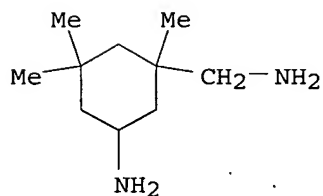
CMF C12 H18 N2 O2



CM 6

CRN 2855-13-2

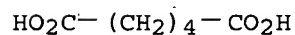
CMF C10 H22 N2



CM 7

CRN 124-04-9

CMF C6 H10 O4



RN 185306-97-2 HCAPLUS

CN Hexanedioic acid, polymer with hexanedioic acid dihydrazide,  $\alpha$ -hydro- $\omega$ -hydroxypoly(oxy-1,2-ethanediyl), 3-hydroxy-2-(hydroxymethyl)-2-methylpropanoic acid, 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane and 3-methyl-1,5-pentanediol, ammonium salt (9CI) (CA INDEX NAME)

CM 1

CRN 185306-96-1

CMF (C12 H18 N2 O2 . C6 H14 N4 O2 . C6 H14 O2 . C6 H10 O4 . C5 H10 O4 . (C2 H4 O)n H2 O)x

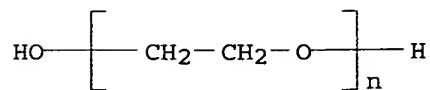
CCI PMS

CM 2

CRN 25322-68-3

CMF (C2 H4 O)n H2 O

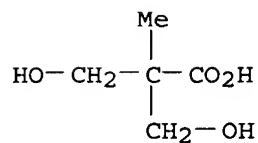
CCI PMS



CM 3

CRN 4767-03-7

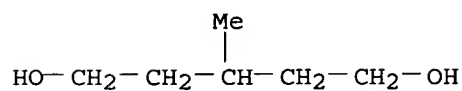
CMF C5 H10 O4



CM 4

CRN 4457-71-0

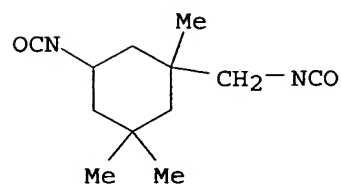
CMF C6 H14 O2



CM 5

CRN 4098-71-9

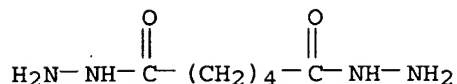
CMF C12 H18 N2 O2



CM 6

CRN 1071-93-8

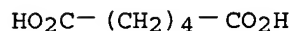
CMF C6 H14 N4 O2



CM 7

CRN 124-04-9

CMF C6 H10 O4



L29 ANSWER 31 OF 51 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1996:721598 HCAPLUS

DOCUMENT NUMBER: 125:331708

TITLE: Water-thinned two-component epoxy-amine coatings and their use

INVENTOR(S): Schwan, Heinrich; Budnick, Thomas

PATENT ASSIGNEE(S): Herberts Gmbh, Germany

SOURCE: Ger., 7 pp.

CODEN: GWXXAW

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19525826	C1	19961024	DE 1995-19525826	19950715
PRIORITY APPLN. INFO.:			DE 1995-19525826	19950715

AB The coatings are based on  $\geq 1$  water-thinnable polyamine hardener from  $\geq 1$  polyether polyol, a mixture of bisphenol A and F polyglycidyl ethers, and  $\geq 1$  amine, and  $\geq 1$  water-thinnable epoxy resin, as well as pigments, fillers, solvents, and possibly polyurethanes and/or polyacrylates. The coatings have improved adhesion and corrosion resistance to various metal substrates and suitable for automotive use. Thus, a polyamine hardener was obtained from bisphenol F diglycidyl ether, bisphenol A diglycidyl ether, polyethylene glycol, m-xylylenediamine, and isophoronediamine. This hardener was mixed with Beckopox EP 384 epoxy resin to provide a primer with open time 2.5 h. Adhesion, corrosion protection, stone impact resistance, and scratch resistance were superior to a coating obtained from EH 623 hardener and Beckopox EP 384.

IT 183742-88-3P, Bisphenol A diglycidyl ether-bisphenol F diglycidyl ether-isophoronediamine-polyethylene glycol-m-xylylenediamine copolymer  
 RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(hardeners for 2-component water-thinned epoxy coatings)

RN 183742-88-3 HCAPLUS

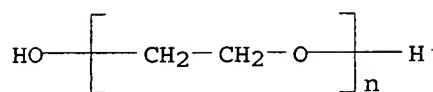
CN 1,3-Benzenedimethanamine, polymer with 5-amino-1,3,3-trimethylcyclohexanemethanamine,  $\alpha$ -hydro- $\omega$ -hydroxypoly(oxy-1,2-ethanediyl), 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]bis[oxirane] and 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[oxirane] (9CI) (CA INDEX NAME)

CM 1

CRN 25322-68-3

CMF (C2 H4 O)<sub>n</sub> H2 O

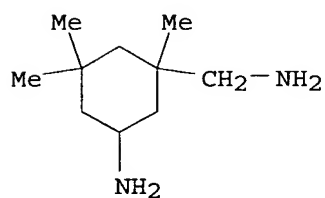
CCI PMS



CM 2

CRN 2855-13-2

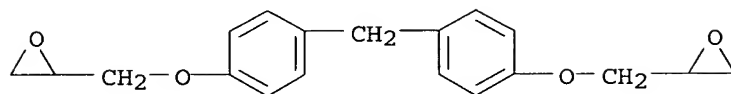
CMF C10 H22 N2



CM 3

CRN 2095-03-6

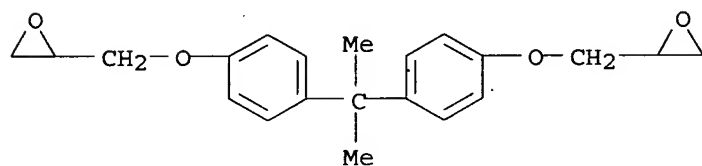
CMF C19 H20 O4



CM 4

CRN 1675-54-3

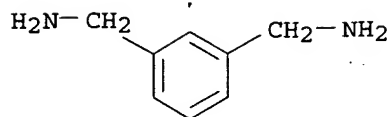
CMF C21 H24 O4



CM 5



CRN 1477-55-0  
CMF C8 H12 N2



IT 183742-89-4P, Beckopox EP 384-bisphenol A diglycidyl ether-bisphenol F diglycidyl ether-isophoronediamine-polyethylene glycol-m-xylylenediamine copolymer  
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(two-component water-thinned epoxy coatings)

RN 183742-89-4 HCAPLUS

CN 1,3-Benzenedimethanamine, polymer with 5-amino-1,3,3-trimethylcyclohexanemethanamine, Beckopox EP 384,  $\alpha$ -hydro- $\omega$ -hydroxypoly(oxy-1,2-ethanediyl), 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]bis[oxirane] and 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[oxirane] (9CI) (CA INDEX NAME)

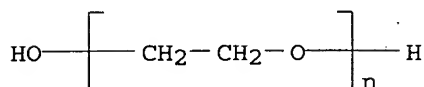
CM 1

CRN 131158-94-6  
CMF Unspecified  
CCI PMS, MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

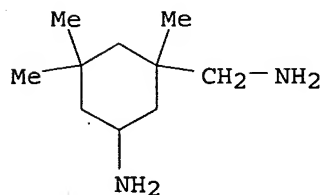
CM 2

CRN 25322-68-3  
CMF (C2 H4 O)<sub>n</sub> H2 O  
CCI PMS

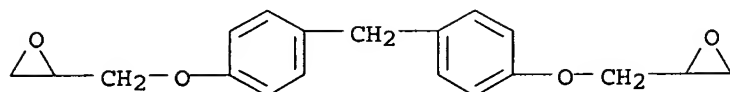


CM 3

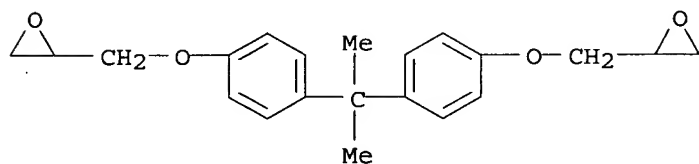
CRN 2855-13-2  
CMF C10 H22 N2



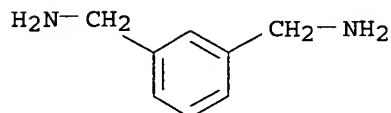
CM 4

CRN 2095-03-6  
CMF C19 H20 O4

CM 5

CRN 1675-54-3  
CMF C21 H24 O4

CM 6

CRN 1477-55-0  
CMF C8 H12 N2

L29 ANSWER 32 OF 51 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1995:842445 HCAPLUS

DOCUMENT NUMBER: 123:256217

TITLE: Preparation of propylene glycol cyclohexyl ether derivatives

INVENTOR(S): Watanabe, Tomonari; Yamashita, Izumi; Chono, Masazumi; Kouno, Tetsushi

PATENT ASSIGNEE(S): Asahi Kasei Kogyo K.K., Japan

SOURCE: Brit. UK Pat. Appl., 69 pp.

CODEN: BAXXDU

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 2281909	A1	19950322	GB 1993-19502	19930921
GB 2281909	B2	19970604		

PRIORITY APPLN. INFO.:

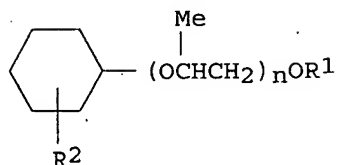
GB 1993-19502

19930921

OTHER SOURCE(S):

CASREACT 123:256217; MARPAT 123:256217

GI



AB The title compds. [I; R1 = (un)branched C1-6 alkyl, cycloalkyl; R2 = H, OH; n = 1-3], useful as surfactants, solvents, and as film-forming agents, are prepared by the reaction of a propylene glycol ethers H(OCHMeCH2)nOR1 with cyclohexene, cyclohexene oxide, or cyclohexanol in the presence of a catalyst. Thus, propylene glycol Me ether was reacted with cyclohexene in the presence of Nafion resin catalyst, producing propylene glycol Me cyclohexyl ether.

IT 107-98-2 110-83-8, Cyclohexene, reactions

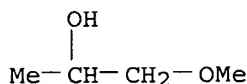
286-20-4, Cyclohexene oxide 57018-52-7

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of propylene glycol cyclohexyl ether derivs.)

RN 107-98-2 HCAPLUS

CN 2-Propanol, 1-methoxy- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)



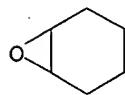
RN 110-83-8 HCAPLUS

CN Cyclohexene (8CI, 9CI) (CA INDEX NAME)



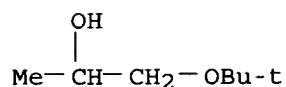
RN 286-20-4 HCAPLUS

CN 7-Oxabicyclo[4.1.0]heptane (8CI, 9CI) (CA INDEX NAME)



RN 57018-52-7 HCAPLUS

CN 2-Propanol, 1-(1,1-dimethylethoxy)- (9CI) (CA INDEX NAME)



IT 168684-04-6

RL: MOA (Modifier or additive use); USES (Uses)  
(preparation of **propylene** glycol cyclohexyl ether derivs. for  
formulation in)

RN 168684-04-6 HCAPLUS

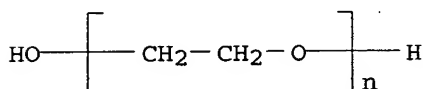
CN Propanoic acid, 3-hydroxy-2-(hydroxymethyl)-2-methyl-, polymer with  
5-amino-1,3,3-trimethylcyclohexanemethanamine, 2-ethyl-2-(hydroxymethyl)-  
1,3-propanediol and  $\alpha$ -hydro- $\omega$ -hydroxypoly(oxy-1,2-ethanediyl)  
(9CI) (CA INDEX NAME)

CM 1

CRN 25322-68-3

CMF (C2 H4 O)<sub>n</sub> H2 O

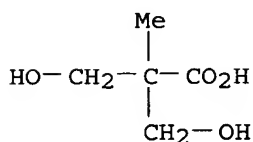
CCI PMS



CM 2

CRN 4767-03-7

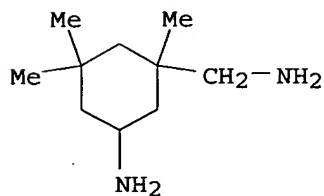
CMF C5 H10 O4



CM 3

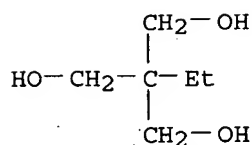
CRN 2855-13-2

CMF C10 H22 N2



CM 4

CRN 77-99-6  
CMF C6 H14 O3



L29 ANSWER 33 OF 51 HCAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 1995:257995 HCAPLUS  
DOCUMENT NUMBER: 122:12697  
TITLE: Manufacture of membrane modules  
INVENTOR(S): Sakai, Kazunari; Ooi, Kazumi  
PATENT ASSIGNEE(S): Dainippon Ink & Chemicals, Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 06254357	A2	19940913	JP 1993-47960	19930309
JP 3405415	B2	20030512		

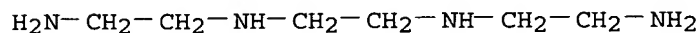
PRIORITY APPLN. INFO.: JP 1993-47960 19930309

AB Hollow-fiber porous membranes are placed in a case, filled with binding agents containing epoxy resins and amine curing agents on the end parts of membranes, and cured for sealing to give a membrane module, whereas the amine curing agents are mixts. of chained aliphatic **polyamines** and/or their modified products, and **cyclic aliphatic polyamines**, aromatic **polyamines**, and/or their modified products (e.g., 1,3-bisaminomethylcyclohexane and/or metaxylenediamine). The membrane modules can be used at  $\geq 60^\circ$ .

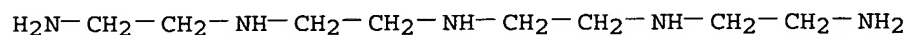
IT 112-24-3, Triethylenetetramine 112-57-2, Tetraethylenepentamine  
RL: TEM (Technical or engineered material use); USES (Uses)  
(curing agents; in binding agents for manufacture of membrane modules)

RN 112-24-3 HCAPLUS

CN 1,2-Ethanediamine, N,N'-bis(2-aminoethyl)- (9CI) (CA INDEX NAME)



RN 112-57-2 HCAPLUS  
CN 1,2-Ethanediamine, N-(2-aminoethyl)-N'-[2-[(2-aminoethyl)amino]ethyl]-  
(9CI) (CA INDEX NAME)



L29 ANSWER 34 OF 51 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1990:94716 HCAPLUS  
 DOCUMENT NUMBER: 112:94716  
 TITLE: Functionalized polyamine chelants and rhodium complexes thereof and process for their preparation  
 INVENTOR(S): Kruper, William J., Jr.; Pollock, Douglas K.; Fordyce, William A.; Fazio, Michael J.; Inbasekaran, Muthiah N.  
 PATENT ASSIGNEE(S): Dow Chemical Co., USA  
 SOURCE: Eur. Pat. Appl., 26 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 8  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 296522	A2	19881228	EP 1988-109799	19880620
EP 296522	A3	19900704		
EP 296522	B1	19960925		
R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
US 4994560	A	19910219	US 1987-65739	19870624
CA 1341349	A1	20020319	CA 1988-569508	19880615
AT 143364	E	19961015	AT 1988-109799	19880620
ES 2091746	T3	19961116	ES 1988-109799	19880620
DK 8803432	A	19881225	DK 1988-3432	19880622
FI 8803046	A	19881225	FI 1988-3046	19880623
FI 101378	B1	19980615		
NO 8802784	A	19881227	NO 1988-2784	19880623
NO 178928	B	19960325		
NO 178928	C	19960703		
AU 8818332	A1	19890105	AU 1988-18332	19880623
AU 614973	B2	19910919		
HU 48636	A2	19890628	HU 1988-3188	19880623
HU 201333	B	19901028		
CN 1030588	A	19890125	CN 1988-104543	19880624
CN 1022839	B	19931124		
JP 01026586	A2	19890127	JP 1988-155058	19880624
JP 2728437	B2	19980318		
ZA 8804545	A	19900228	ZA 1988-4545	19880624
KR 9711005	B1	19970705	KR 1988-7673	19880624
US 5064956	A	19911112	US 1990-549791	19900709
NO 180748	B	19970303	NO 1995-1117	19950323
NO 180748	C	19970611		
KR 132614	B1	19980413	KR 1997-10765	19970327
PRIORITY APPLN. INFO.:			US 1987-65739	A 19870624
			NO 1988-2784	A1 19880623
			KR 1988-7673	A3 19880624
			US 1988-211496	B2 19880624
			US 1988-289163	B2 19881222
			US 1989-370956	A2 19890621

OTHER SOURCE(S): MARPAT 112:94716

GI For diagram(s), see printed CA Issue.

AB Functionalized polyamine chelants I [R = C2-10 straight chain or branched alkylene (providing  $\geq 3$  single bonds between the 2 N it connects); R1 = H, C1-10 straight chain or branched alkylene; X, X1 = H; or X and X1 complete a bridging straight chain or branched C2-10 alkylene or aralkylene (providing  $\geq 3$  single bonds between the adjacent N); n = 0-1; y = 1-3; L = linker/spacer covalently bonded to and replacing 1 H of any of the N or C, Q (s = 0,1; t = 0-20; R2 = electrophilic or nucleophilic moiety allowing covalent attachment to an antibody or its

fragment, or a synthetic linker; Cyc = cyclic aliphatic, aromatic, aliphatic heterocyclic, or aromatic heterocyclic moiety, optionally substituted)] form complexes with Rh. The Rh complexes can be attached to an antibody or its fragment and used for therapeutic or diagnostic purposes. 105RhCl<sub>3</sub> was reacted with 6-[4-(aminophenyl)methyl]-1,4,8,11-tetraazaundecane (preparation given), the chelate was converted to the reactive p-isothiocyanatobenzyl derivative by treatment with thiophosgene, and the reactive derivative was conjugated to lysine residues of antibodies CC-49 and B72.3 specific for tumor-associated antigen TAG-72. The 105Rh-labeled antibodies localized on LS-174T (colon carcinoma) tumors in nude mice.

IT 107-15-3, Ethylenediamine, reactions

RL: RCT (Reactant); RACT (Reactant or reagent)

(reaction of, in preparation of rhodium chelate complexes-antibody conjugates)

RN 107-15-3 HCAPLUS

CN 1,2-Ethanediamine (9CI) (CA INDEX NAME)

H<sub>2</sub>N-CH<sub>2</sub>-CH<sub>2</sub>-NH<sub>2</sub>

L29 ANSWER 35 OF 51 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1989:536180 HCAPLUS

Correction of: 1987:460773

DOCUMENT NUMBER: 111:136180

Correction of: 107:60773

TITLE: Amide-containing polyhydroxyethyl carbamates

INVENTOR(S): Chang, Wen Hsuan

PATENT ASSIGNEE(S): PPG Industries, Inc., USA

SOURCE: U.S., 6 pp.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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US 4588783	A	19860513	US 1983-562318	19831216
PRIORITY APPLN. INFO.:			US 1983-562318	19831216

AB Amide-containing polyhydroxyethyl carbamates, prepared by reacting amidoamines with cyclic organic carbonates, are curable by self-reaction or external reactions with active H-containing groups or compds. Thus, an amidoamine formed by aminolysis of dimethyl cyclohexanedicarboxylate with isophorone diamine was reacted with propylene carbonate to give a polyhydroxyethyl carbamate (I). I (20 g) was self-cured using 0.3 g dibutyltin dilaurate at 163° as coating on steel, giving pencil hardness HB.

IT 25068-38-6

RL: RCT (Reactant); RACT (Reactant or reagent)

(crosslinking of, with amide-containing polyhydroxyethyl carbamates, as coatings)

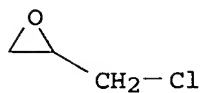
RN 25068-38-6 HCAPLUS

CN Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane (9CI) (CA INDEX NAME)

CM 1

CRN 106-89-8

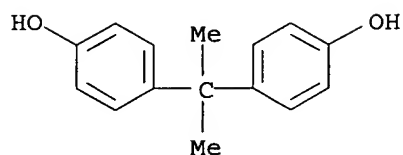
CMF C3 H5 Cl O



CM 2

CRN 80-05-7

CMF C15 H16 O2



IT 104063-53-8DP, reaction products with propylene carbonate

RL: RCT (Reactant); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(preparation and curing of, as coatings)

RN 104063-53-8 HCAPLUS

CN Cyclohexanedicarboxylic acid, amide with 5-amino-1,3,3-trimethylcyclohexanemethanamine (1:2) (9CI) (CA INDEX NAME)

CM 1

CRN 31290-91-2

CMF C8 H12 O4

CCI IDS



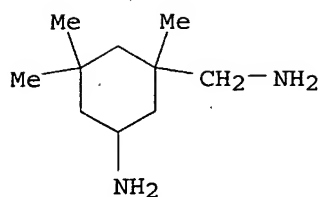
2 [ D1-CO<sub>2</sub>H ]

CM 2

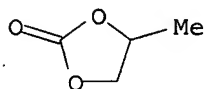
CRN 2855-13-2

CMF C10 H22 N2

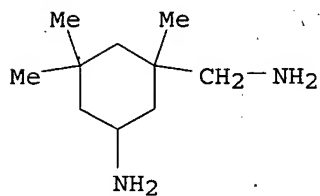




IT 108-32-7DP, reaction products with amidoamines  
 104083-02-5DP, reaction products with propylene carbonate  
 RL: RCT (Reactant); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)  
 (preparation and curing of, for coatings)  
 RN 108-32-7 HCAPLUS  
 CN 1,3-Dioxolan-2-one, 4-methyl- (9CI) (CA INDEX NAME)



RN 104083-02-5 HCAPLUS  
 CN Hexanoic acid, 6-amino-, monoamide with 5-amino-1,3,3-trimethylcyclohexanemethanamine (9CI) (CA INDEX NAME)  
 CM 1  
 CRN 2855-13-2  
 CMF C10 H22 N2



CM 2  
 CRN 60-32-2  
 CMF C6 H13 N O2

H<sub>2</sub>N-(CH<sub>2</sub>)<sub>5</sub>-CO<sub>2</sub>H

IT 104063-53-8P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and reaction of, with propylene carbonate)  
 RN 104063-53-8 HCAPLUS

CN Cyclohexanedicarboxylic acid, amide with 5-amino-1,3,3-trimethylcyclohexanemethanamine (1:2) (9CI) (CA INDEX NAME)

CM 1

CRN 31290-91-2

CMF C8 H12 O4

CCI IDS

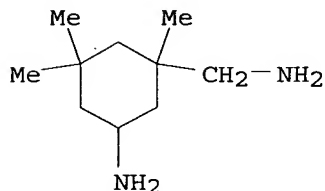


2 [ D1-CO<sub>2</sub>H ]

CM 2

CRN 2855-13-2

CMF C10 H22 N2



IT 104083-02-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP

(Preparation); RACT (Reactant or reagent)

(preparation and reactions of, with propylene carbonate)

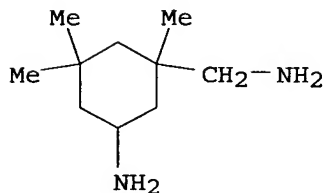
RN 104083-02-5 HCAPLUS

CN Hexanoic acid, 6-amino-, monoamide with 5-amino-1,3,3-trimethylcyclohexanemethanamine (9CI) (CA INDEX NAME)

CM 1

CRN 2855-13-2

CMF C10 H22 N2



CM 2

CRN 60-32-2

CMF C6 H13 N O2

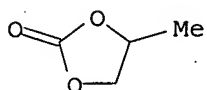
 $\text{H}_2\text{N}-(\text{CH}_2)_5-\text{CO}_2\text{H}$ 

IT 108-32-7

RL: RCT (Reactant); RACT (Reactant or reagent)  
(reaction of, with amidoamines)

RN 108-32-7 HCAPLUS

CN 1,3-Dioxolan-2-one, 4-methyl- (9CI) (CA INDEX NAME)



L29 ANSWER 36 OF 51 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1989:116822 HCAPLUS

DOCUMENT NUMBER: 110:116822

TITLE: Manufacture of hydroxyalkyl carbamates for  
polyurethane coatings

INVENTOR(S): Blank, Werner Josef

PATENT ASSIGNEE(S): King Industries, Inc., USA

SOURCE: Eur. Pat. Appl., 12 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

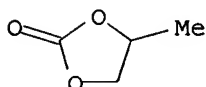
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 280815	A2	19880907	EP 1987-311132	19871217
EP 280815	A3	19891227		
EP 280815	B1	19940202		
R: AT, BE, DE, ES, FR, GB, GR, IT, NL, SE				
US 4820830	A	19890411	US 1987-20431	19870302
AT 101127	E	19940215	AT 1987-311132	19871217
ES 2061517	T3	19941216	ES 1987-311132	19871217
CA 1341178	A1	20010213	CA 1988-556295	19880112
JP 63227557	A2	19880921	JP 1988-21438	19880202
JP 07002704	B4	19950118		
US 5134205	A	19920728	US 1989-329758	19890328
PRIORITY APPLN. INFO.:			US 1987-20431	A 19870302
			EP 1987-311132	A 19871217

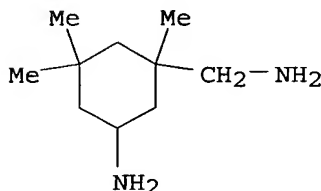
AB The reaction of cyclic carbonates with branched (cyclo)alkanediamines gives nontoxic hydroxyalkyl carbamates which are treated with polyester polyols to give light-resistant, noncryst., oligourethanes useful in high-solids coatings. Heating 2.2 mol propylene carbonate with 1 mol 2-methyl-1,5-pentanediamine at 90-100° give a product (viscosity 1420 Pa-s; residual amine 0.8 mequiv/g) which was heated (1 mol) 4 h at 160° with a polyol from 16:61:23 di-Me adipate-di-Me glutarate-di-Me succinate and cyclohexanedimethanol and diluted to 81.4%

solids [viscosity 4010 cP, OH number of polymer (I) 96]. A 69.8%-solids composition containing a 75% acrylic polymer solution 93.33, I solution 30.77, hexakis(methoxymethyl)melamine 30.98, and 25% catalyst solution 2.61 parts was coated on steel and cured 20 min at 120° to give a 0.8-0.9 mil film with pencil hardness HB-F, reverse and front impact strength  $\geq 160$  in.-lb, and crosscut adhesion 90%.

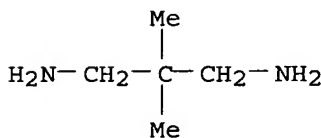
IT 108-32-7, Propylene carbonate  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reaction of, with aliphatic diamines)  
 RN 108-32-7 HCAPLUS  
 CN 1,3-Dioxolan-2-one, 4-methyl- (9CI) (CA INDEX NAME)



IT 2855-13-2 7328-91-8  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reaction of, with propylene carbonate)  
 RN 2855-13-2 HCAPLUS  
 CN Cyclohexanemethanamine, 5-amino-1,3,3-trimethyl- (9CI) (CA INDEX NAME)



RN 7328-91-8 HCAPLUS  
 CN 1,3-Propanediamine, 2,2-dimethyl- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)



L29 ANSWER 37 OF 51 HCAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1985:596803 HCAPLUS  
 DOCUMENT NUMBER: 103:196803  
 TITLE: DSC and DMA analysis of the curing of a liquid epoxy resin with diamines  
 AUTHOR(S): Toussaint, A.; Cuypers, P.; D'Hont, L.  
 CORPORATE SOURCE: Coat. Res. Inst., Limelette, B-1342, Belg.  
 SOURCE: Journal of Coatings Technology (1985), 57(728), 71-8  
 CODEN: JCTEDL; ISSN: 0361-8773  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB The curing of Araldite GY 250 [25068-38-6] (epoxy resin) with isophoronediamine [2855-13-2] and a mixture of 2,2,4-trimethylhexamethylenediamine [3236-53-1] and 2,4,4-

trimethylhexamethylenediamine [3236-54-2] was studied by DSC and dynamic mech. anal. The curing kinetic parameters change with curing temperature, extent of conversion of the reactive groups, and the presence of 2,4,6-tris[(dimethylamino)methyl]phenol [90-72-2] crosslinking catalyst. The curing process proceeded through 5 steps: microgel formation, macrogel formation, macroscopic gel point, macroscopic crosslinking, and vitrification.

IT 25068-38-6

RL: RCT (Reactant); RACT (Reactant or reagent)  
(crosslinking of, in presence of diamines and  
tris[(dimethylamino)methyl]phenol, kinetics of)

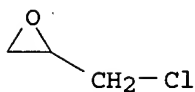
RN 25068-38-6 HCAPLUS

CN Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane  
(9CI) (CA INDEX NAME)

CM 1

CRN 106-89-8

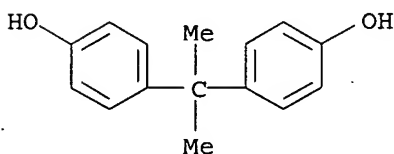
CMF C3 H5 Cl O



CM 2

CRN 80-05-7

CMF C15 H16 O2



L29 ANSWER 38 OF 51 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1984:552722 HCAPLUS

DOCUMENT NUMBER: 101:152722

TITLE: Structure-photooxidative stability relationship of  
amine-crosslinked epoxies

AUTHOR(S): Bellenger, V.; Verdu, J.

CORPORATE SOURCE: Dep. Mater., Ec. Natl. Super. Arts Metiers, Paris,  
75640, Fr.

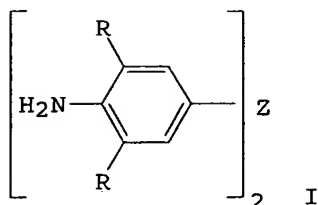
SOURCE: Polymer Photochemistry (1984), 5(1-6), 295-311

CODEN: POPHDO; ISSN: 0144-2880

DOCUMENT TYPE: Journal

LANGUAGE: English

GI



AB The photooxidn. of 19 networks based on N,N,N',N'-tetraglycidylmethylenedianiline homopolymer [31305-94-9], bisphenol A-epichlorohydrin copolymer [25068-38-6], and epichlorohydrin-4,4'-methylenediphenol copolymer [42423-25-6] crosslinked by diethylenetriamine [111-40-0], N,N'-bis(2-aminoethyl)piperazine [6531-38-0], isophoronediamine [2855-13-2], and aromatic diamines (I, R = H, Me, Et, or Pr, Z = CH<sub>2</sub>, O, or SO<sub>2</sub>) was studied by IR and UV spectrophotometry. The main changes resulted from the oxidative attack of aliphatic segments; the groups in the β or γ position relative to nitrogen lead to carbonyls, whereas those in the α position lead to amides. The bisphenol moiety of epoxy resins was mainly involved in the initiation. The amide yield essentially depended on α-aminomethylene concentration and on electron d. on nitrogen, which governed the H abstraction on neighboring methylenes. At least three kinds of chromophores were formed, resulting from the oxidation of, resp., bisphenol moiety, amine, and, when present, the bridge of the methylenedianiline moiety.

IT 25068-38-6

RL: RCT (Reactant); RACT (Reactant or reagent)

(oxidative photodegrdn. of, amine crosslinker effect on)

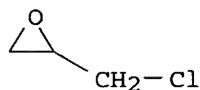
RN 25068-38-6 HCAPLUS

CN Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane (9CI) (CA INDEX NAME)

CM 1

CRN 106-89-8

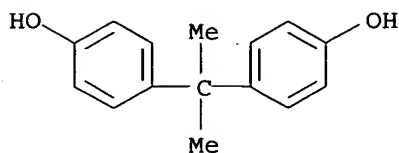
CMF C3 H5 Cl O



CM 2

CRN 80-05-7

CMF C15 H16 O2



L29 ANSWER 39 OF 51 HCAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1981:209564 HCAPLUS  
 DOCUMENT NUMBER: 94:209564  
 TITLE: Photooxidation of epoxy resins cured by nonaromatic amines  
 AUTHOR(S): Bellenger, V.; Bouchard, C.; Claveirolle, P.; Verdu, J.  
 CORPORATE SOURCE: Dep. Mater., Ec. Natl. Super. Arts Metiers, Paris, 75640/13, Fr.  
 SOURCE: Polymer Photochemistry (1981), 1(1), 69-80  
 CODEN: POPHDO; ISSN: 0144-2880  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB The photooxidn. of bisphenol A diglycidyl ether polymer [25085-99-8] cured by nonarom. amines (diethylenetriamine [111-40-0], aminoethylpiperazine [28631-79-0], or isophoronediamine [2855-13-2]) results in carbonyl and amide formation, decrease of glass transition temperature, and the appearance of a new endotherm at 70-80° in the differential scanning calorimetry curves. The carbonyl and, essentially the amide yield depend on the hardener structure and concentration. The mechanisms of formation of these groups are discussed.  
 IT 111-40-0  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (epoxy resins crosslinked by, photooxidn. of)  
 RN 111-40-0 HCAPLUS  
 CN 1,2-Ethanediamine, N-(2-aminoethyl)- (9CI) (CA INDEX NAME)



L29 ANSWER 40 OF 51 HCAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1980:640510 HCAPLUS  
 DOCUMENT NUMBER: 93:240510  
 TITLE: Acrylate-acetoacetamide polymers  
 INVENTOR(S): Heckles, John S.  
 PATENT ASSIGNEE(S): Armstrong Cork Co., USA  
 SOURCE: U.S., 8 pp.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4217439	A	19800812	US 1978-916967	19780619
US 4271237	A	19810602	US 1979-65139	19790809
CA 1132748	A1	19820928	CA 1980-346605	19800228
PRIORITY APPLN. INFO.:			US 1978-916967	A3 19780619

AB A crosslinked copolymer is prepared with  $\geq 1$  each polyfunctional acrylate and acetoacetamide derivs., at a ratio of .apprx.1.2-.apprx.1.4 mol acrylate per mol acetoacetamide derivative, and a strong base catalyst. Thus, 85 g 3-aminomethyl-3,5,5-trimethylcyclohexylamine [2855-13-2] were treated with 80 g diketene [674-82-8] in 325 mL CH<sub>2</sub>Cl<sub>2</sub> to form isophorone diacetoacetamide (I) [75639-73-5]. Similarly, 28.4 g 1,4-cyclohexanebis(methylamine) [2549-93-1] were treated with 33.6 g

diketene in 100 mL CH<sub>2</sub>Cl<sub>2</sub> to form 1,4-cyclohexanebis (methylacetoacetamide) (II) [75639-74-6]. Then polyethylene glycol 200 diacrylate 3.1, I 1.1, and II 1.0 g was treated with 0.05 g of 40% benzyltrimethylammonium methoxide in MeOH catalyst solution at 60° for 20 min. The polymer [75657-20-4] was cured for .apprx.16 h at 60°. It had a Tg range of 11-27°, and a mid-point of 19°.

IT 75656-97-2P 75685-89-1P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation and glass temperature of)

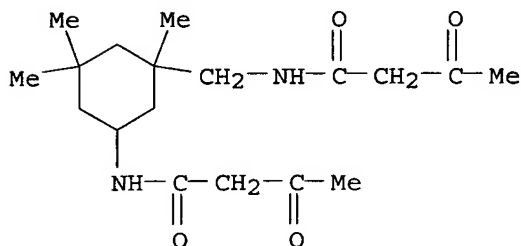
RN 75656-97-2 HCAPLUS

CN 2-Propenoic acid, 1,2-ethanediyl ester, polymer with N-[3-[[[(1,3-dioxobutyl)amino]methyl]-3,5,5-trimethylcyclohexyl]-3-oxobutanamide (9CI)  
(CA INDEX NAME)

CM 1

CRN 75639-73-5

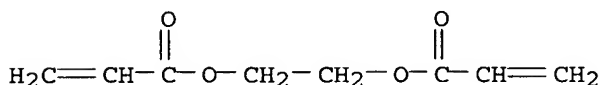
CMF C18 H30 N2 O4



CM 2

CRN 2274-11-5

CMF C8 H10 O4



RN 75685-89-1 HCAPLUS

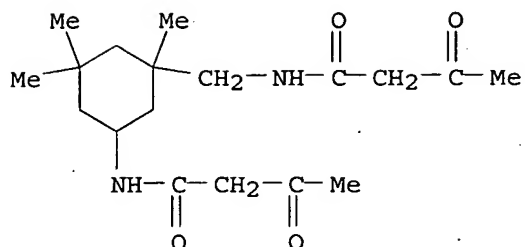
CN 2-Propenoic acid, (1-methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)] ester, polymer with N-[3-[[[(1,3-dioxobutyl)amino]methyl]-3,5,5-trimethylcyclohexyl]-3-oxobutanamide (9CI) (CA INDEX NAME)

CM 1

CRN 75639-73-5

CMF C18 H30 N2 O4



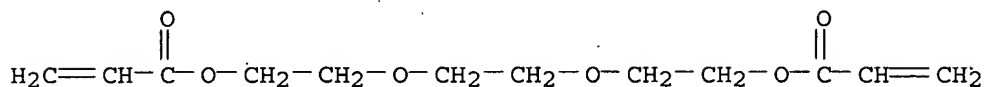


CM 2

CRN 42978-66-5

CMF C15 H24 O6

CCI IDS



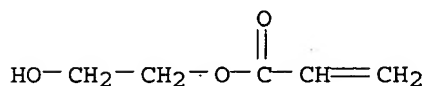
3 ( D1-Me )

IT 818-61-1

RL: RCT (Reactant); RACT (Reactant or reagent)  
(reaction of, with diisocyanates)

RN 818-61-1 HCAPLUS

CN 2-Propenoic acid, 2-hydroxyethyl ester (9CI) (CA INDEX NAME)

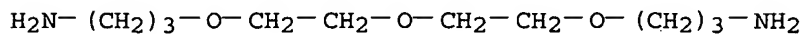


IT 4246-51-9

RL: RCT (Reactant); RACT (Reactant or reagent)  
(reaction of, with diketene)

RN 4246-51-9 HCAPLUS

CN 1-Propanamine, 3,3'-[oxybis(2,1-ethanediylloxy)]bis- (9CI) (CA INDEX NAME)



L29 ANSWER 41 OF 51 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1980:111670 HCAPLUS

DOCUMENT NUMBER: 92:111670

TITLE: Polyurethanes dispersible or soluble in water

INVENTOR(S): Nachtkamp, Klaus; Pedain, Josef; Noll, Klaus

PATENT ASSIGNEE(S): Bayer A.-G., Fed. Rep. Ger.

SOURCE: Eur. Pat. Appl., 34 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 4927	A1	19791031	EP 1979-101083	19790409
EP 4927	B1	19820224		
R: BE, DE, FR, GB, IT, NL, SE				
DE 2816815	A1	19791031	DE 1978-2816815	19780418
CA 1159598	A1	19831227	CA 1979-325359	19790411
JP 54138098	A2	19791026	JP 1979-45514	19790416
JP 63020248	B4	19880427		
US 4303774	A	19811201	US 1979-30600	19790416
ES 479647	A1	19790801	ES 1979-479647	19790417
AU 7946080	A1	19791025	AU 1979-46080	19790417
AU 522002	B2	19820513		
AT 7902843	A	19850615	AT 1979-2843	19790417
AT 379603	B	19860210		

PRIORITY APPLN. INFO.: DE 1978-2816815 19780418

AB The title compns. contain 0.5-20% polyoxyethylene units and 0.1-25 mequiv. SO<sub>3</sub>H groups/100 g. Thus, air was blown through a solution of 85:15 polyethylene-polypropylene glycol monoallyl ether [9041-33-2] (OH number 56.2) 1000, Na<sub>2</sub>S<sub>2</sub>O<sub>5</sub> 190, and H<sub>2</sub>O 200 g stirred at 100° for 24 h; the solution was acidified to pH 2.0, and air was blown through for 10 h to give polyethylene-polypropylene glycol mono(sulfopropyl) ether (I) [72711-05-8], viscosity 500 mPa·s at 20°, containing 3.0% S. Stirring I 154, trimethylolpropane 10.7, poly(butylene adipate) (mol. weight 900) 729, and isophorone diisocyanate 399.6 g at 90° to NCO content 5.2%; cooling; adding 2 kg Me<sub>2</sub>CO and, dropwise, 119 g isophoronediamine and 10 g N<sub>2</sub>H<sub>4</sub>·H<sub>2</sub>O, and then 2.13 kg H<sub>2</sub>O; and distilling Me<sub>2</sub>CO gave a 40% aqueous polyurethane [72981-13-6] dispersion, Ford cup. number 4 viscosity 18 s, containing 7.5% polyoxyethylene and 9.9 mequiv. SO<sub>3</sub>H/100 g.

IT 9041-33-2 27274-31-3

RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reaction of, with disodium pyrosulfite)

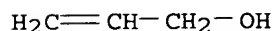
RN 9041-33-2 HCAPLUS

CN Oxirane, methyl-, polymer with oxirane, mono-2-propenyl ether (9CI) (CA INDEX NAME)

CM 1

CRN 107-18-6

CMF C3 H6 O



CM 2

CRN 9003-11-6

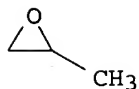
CMF (C3 H6 O . C2 H4 O)x

CCI PMS

CM 3

CRN 75-56-9

CMF C3 H6 O



CM 4

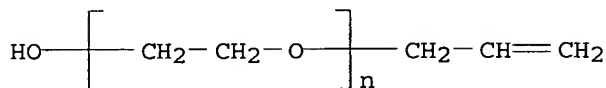
CRN 75-21-8

CMF C2 H4 O



RN 27274-31-3 HCAPLUS

CN Poly(oxy-1,2-ethanediyl),  $\alpha$ -2-propenyl- $\omega$ -hydroxy- (9CI) (CA  
INDEX NAME)



L29 ANSWER 42 OF 51 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1979:73407 HCAPLUS

DOCUMENT NUMBER: 90:73407

TITLE: Curable epoxy resin compositions

INVENTOR(S): Bagga, Madan Mohan; Moss, Noel Sydney

PATENT ASSIGNEE(S): Ciba-Geigy A.-G., Switz.

SOURCE: Brit., 9 pp.

CODEN: BRXXAA

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 1515473	A	19780628	GB 1976-12419	19770310
PRIORITY APPLN. INFO.:			GB 1976-12419	A 19770310

AB The title compns. useful as coatings were manufactured from epoxy compns. containing a phenol-alkylene oxide adduct as diluent, an amine curing agent, and a curing accelerator. Thus, to 100 parts 2,2-bis(4-glycidyloxyphenyl)propane [1675-54-3] at room temperature was added 100 parts of a blend containing 74 parts PhOCH<sub>2</sub>CMeOH [770-35-4] prepared by treating PhOH [108-95-2] with propylene oxide [75-56-9] in the presence of Et<sub>3</sub>N, 22 parts isophoronediamine [2855-13-2], and 4 parts 2,4,6-tris(dimethylaminomethyl)phenol. A 150- $\mu$ -thick coating when applied to shot-blasted steel sheets cured within 24 h to give a hard, smooth, glossy film.

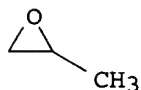
IT 75-21-8, reactions

RL: RCT (Reactant); RACT (Reactant or reagent)  
(reaction of, with alkylphenols)

RN 75-21-8 HCAPLUS  
CN Oxirane (9CI) (CA INDEX NAME)

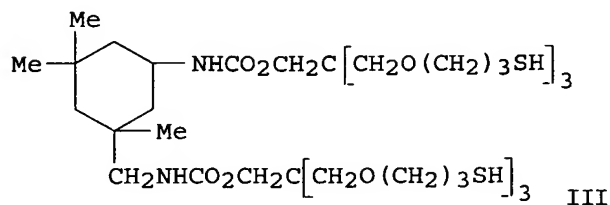


IT 75-56-9, reactions  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(reaction of, with phenol)  
RN 75-56-9 HCAPLUS  
CN Oxirane, methyl- (9CI) (CA INDEX NAME)



L29 ANSWER 43 OF 51 HCAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 1977:107221 HCAPLUS  
DOCUMENT NUMBER: 86:107221  
TITLE: Novel urethane polythiols  
INVENTOR(S): Guthrie, James L.; Kehr, Clifton L.  
PATENT ASSIGNEE(S): W. R. Grace and Co., USA  
SOURCE: U.S., 9 pp.  
CODEN: USXXAM  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 4  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3984456	A	19761005	US 1975-598595	19750724
BE 838252	A1	19760528	BE 1976-164083	19760203
SE 7601153	A	19760804	SE 1976-1153	19760203
NL 7601068	A	19760805	NL 1976-1068	19760203
FR 2313358	A1	19761231	FR 1976-2970	19760203
PRIORITY APPLN. INFO.: GI			US 1975-546709	A3 19750203



AB Urethane polythiols were prepared by reacting a hydroxypolythiol with an isocyanate. Thus, to a solution of 650 g NaOH in 650 ml H2O was added 272 g pentaerythritol [115-77-5], the mixture was stirred and heated to 70°, 1936 g allyl bromide [106-95-6] was added over 8 hr while the temperature remained at 70-80°, the mixture was heated 4 hr at

80-82°, volatile materials were removed by distillation at atmospheric pressure,

1 l. H<sub>2</sub>O was added to prevent crystallization, the product was cooled to room temperature and the layers were separated. The H<sub>2</sub>O layer was extracted twice with 300

ml. diethyl ether, and the combined organic layers were dried over anhydrous Mg sulfate and distilled at atmospheric pressure to give 451 g pentaerythritol triallyl

ether (I) [1471-17-6]. Tert-Bu peroxide (10 drops) was added to 85.2 g I, the mixture was heated to 40°, 76 g thiolacetic acid [507-09-5] was added over 1 hr while the temperature remained at ≤90°, and the product was kept 1 hr at 80° and cooled to room temperature overnight.

To the product was added 100 g NaOH in 200 ml H<sub>2</sub>O, the mixture was heated 3 hr under reflux, cooled to room temperature, dild with 300 ml. ether, and the layers separated. The H<sub>2</sub>O layer was acidified and extracted with ether, ether

was

evaporated from the combined organic layers, the residue was diluted with toluene,

and the solution was washed with 5% aqueous NaHCO<sub>3</sub>, 5% aqueous HCl, and H<sub>2</sub>O and

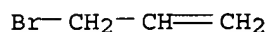
distilled to give 119 g pentaerythritol tris(β-mercaptopropyl) ether (II) [55937-06-9]. II (35.8 g) was mixed with 11.1 g isophorone diisocyanate and 0.05 g tin octoate and allowed to stand 66 hr to give a urethane polythiol (III) [60690-26-8]. III could be further used in the preparation of photocurable films.

IT 106-95-6, reactions

RL: RCT (Reactant); RACT (Reactant or reagent)  
(reaction of, with pentaerythritol)

RN 106-95-6 HCAPLUS

CN 1-Propene, 3-bromo- (9CI) (CA INDEX NAME)



L29 ANSWER 44 OF 51 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1976:578427 HCAPLUS

DOCUMENT NUMBER: 85:178427

TITLE: Novel urethane polythiols

INVENTOR(S): Guthrie, James L.; Kehr, Clifton L.

PATENT ASSIGNEE(S): W. R. Grace and Co., USA

SOURCE: U.S., 9 pp.

CODEN: USXXAM

DOCUMENT TYPE: Patent

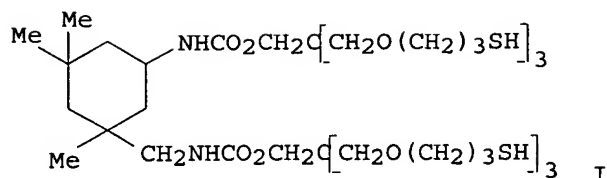
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3981904	A	19760921	US 1975-598912	19750724
BE 838252	A1	19760528	BE 1976-164083	19760203
SE 7601153	A	19760804	SE 1976-1153	19760203
NL 7601068	A	19760805	NL 1976-1068	19760203
FR 2313358	A1	19761231	FR 1976-2970	19760203
PRIORITY APPLN. INFO.:			US 1975-546709	A3 19750203

GI



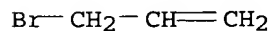
AB Pentaerythritol [115-77-5] in aqueous NaOH was heated with allyl bromide [106-95-6] to form the triallyl ether [1471-17-6] which was converted, by heating with thiolacetic acid [507-09-5] in the presence of tert-Bu-hydroperoxide, to pentaerythritol tris(β-mercaptopropyl) ether [55937-06-9] and admixed stoichiometrically with isophorone diisocyanate [4098-71-9] to form the polythiol monomer (I) [60690-26-8]. Mixts. of I and triallyl isocyanurate containing benzophenone accelerator photocured to form polymer [60690-27-9] films having good tensile strength and elongation.

IT 106-95-6

RL: RCT (Reactant); RACT (Reactant or reagent)  
(reaction of, with pentaerythritol)

RN 106-95-6 HCAPLUS

CN 1-Propene, 3-bromo- (9CI) (CA INDEX NAME)



L29 ANSWER 45 OF 51 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1976:578426 HCAPLUS

DOCUMENT NUMBER: 85:178426

TITLE: Novel urethane polythiols

INVENTOR(S): Guthrie, James L.; Kehr, Clifton L.

PATENT ASSIGNEE(S): W. R. Grace and Co., USA

SOURCE: U.S., 8 pp.

CODEN: USXXAM

DOCUMENT TYPE: Patent

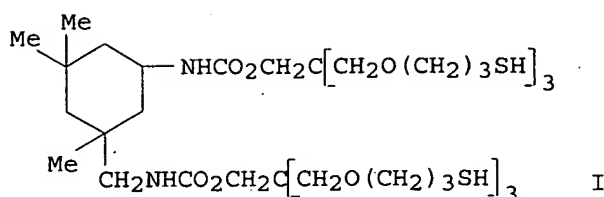
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3981901	A	19760921	US 1975-598594	19750724
BE 838252	A1	19760528	BE 1976-164083	19760203
SE 7601153	A	19760804	SE 1976-1153	19760203
NL 7601068	A	19760805	NL 1976-1068	19760203
FR 2313358	A1	19761231	FR 1976-2970	19760203
PRIORITY APPLN. INFO.:			US 1975-546709	A3 19750203

GI



AB Pentaerythritol [115-77-5] in aqueous NaOH was heated with allyl bromide [106-95-6] to form triallyl ether [1471-17-6] which was converted, by heating with thiolacetic acid [507-09-5] in the presence of tert-Bu hydroperoxide, to pentaerythritol tris( $\beta$ -mercaptopropyl) ether [55937-06-9] and admixed stoichiometrically with isophorone diisocyanate [4098-71-9] to form the polythiol monomer (I) [60690-26-8]. Mixts. of I and triallyl isocyanurate containing benzophenone accelerator photocured to form polymer [60690-27-9] films having good tensile strength and elongation.

IT 106-95-6

RL: RCT (Reactant); RACT (Reactant or reagent)  
(reaction of, with pentaerythritol)

RN 106-95-6 HCAPLUS

CN 1-Propene, 3-bromo- (9CI) (CA INDEX NAME)

Br-CH<sub>2</sub>-CH=CH<sub>2</sub>

L29 ANSWER 46 OF 51 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1976:578404 HCAPLUS

DOCUMENT NUMBER: 85:178404

TITLE: Unsaturated poly(ester amides) and hardenable resins prepared from them

INVENTOR(S): Corrado, Giovanni

PATENT ASSIGNEE(S): SNIA VISCOSA Societa Nazionale Industria Applicazioni Viscosa, Italy

SOURCE: Ger. Offen., 29 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2607487	A1	19760902	DE 1976-2607487	19760220
NL 7601378	A	19760824	NL 1976-1378	19760211
US 4115370	A	19780919	US 1976-657268	19760211
GB 1534346	A	19781206	GB 1976-6169	19760217
JP 51107398	A2	19760922	JP 1976-16085	19760218
BE 838799	A1	19760616	BE 1976-164517	19760220
DK 7600714	A	19760822	DK 1976-714	19760220
FR 2301549	A1	19760917	FR 1976-4768	19760220

PRIORITY APPLN. INFO.: IT 1975-20489 A 19750221

AB Unsatd. poly(amide esters) crosslinkable to low-d. plastics with low water absorption and good phys. and mech. properties were prepared from polyamide prepolymers and hydroxyalkyl or hydroxyalkoxyalkyl esters of unsatd.

and dicarboxylic acids. For example, under inert atmospheric, 181 g Empoly 1014

25 g 2,4,4-trimethyl-1,6-hexanediamine were heated with 0.1% catalyst at 160° with H<sub>2</sub>O distillation to amine value 0 and then with 47 g bis[2-(2-hydroxyethoxy)ethyl] fumarate [3164-53-2] containing 220 ppm. hydroquinone at 200°/0.2 torr to acid value 20 to give poly(amide ester) which, as 50% solution in styrene, was cured in the presence of 2% Bz<sub>2</sub>O<sub>2</sub> paste at 70% for 12 hr and at 100% for 2 hr to give a plastic with ultimate elongation 120%, tensile strength 250 kp/cm<sup>2</sup>, bending modulus 6000 kg/cm<sup>2</sup>, and impact strength 45 kg/cm.

IT 60864-79-1P 60864-80-4P 60864-81-5P  
60864-82-6P 60864-83-7P 60864-84-8P  
60864-85-9P 60864-86-0P 60901-54-4P  
60934-18-1P 60934-19-2P 60946-65-8P  
61046-10-4P

RL: IMF (Industrial manufacture); RCT (Reactant); PREP  
(Preparation); RACT (Reactant or reagent)  
(manufacture and crosslinking of)

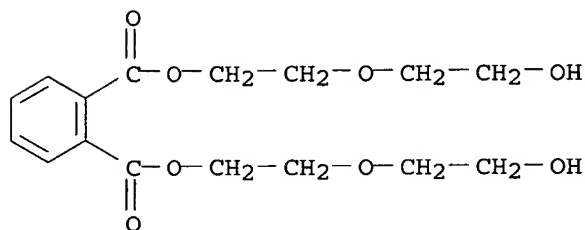
RN 60864-79-1 HCAPLUS

CN 1,2-Benzenedicarboxylic acid, bis[2-(2-hydroxyethoxy)ethyl] ester, polymer with (E)-bis[2-(2-hydroxyethoxy)ethyl] 2-butenedioate, dodecanedioic acid and 2,4,4-trimethyl-1,6-hexanediamine (9CI) (CA INDEX NAME)

CM 1

CRN 31937-98-1

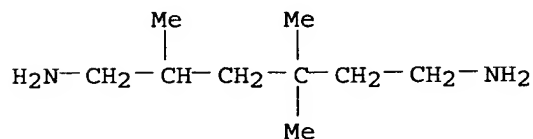
CMF C16 H22 O8



CM 2

CRN 3236-54-2

CMF C9 H22 N2



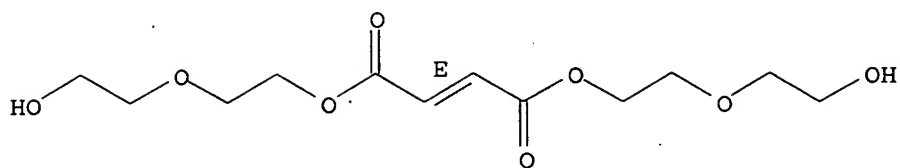
CM 3

CRN 3164-53-2

CMF C12 H20 O8

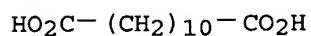
Double bond geometry as shown.





CM 4

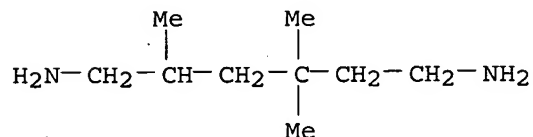
CRN 693-23-2  
CMF C12 H22 O4



RN 60864-80-4 HCAPLUS  
CN 1,3-Benzenedicarboxylic acid, polymer with (2E)-2-butenedioic acid, dodecanedioic acid, 2,2'-oxybis[ethanol], and 2,4,4-trimethyl-1,6-hexanediamine (9CI) (CA INDEX NAME)

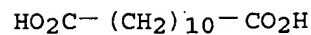
CM 1

CRN 3236-54-2  
CMF C9 H22 N2



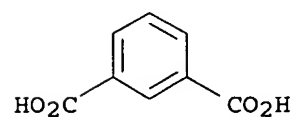
CM 2

CRN 693-23-2  
CMF C12 H22 O4



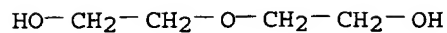
CM 3

CRN 121-91-5  
CMF C8 H6 O4



CM 4

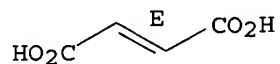
CRN 111-46-6  
CMF C4 H10 O3



CM 5

CRN 110-17-8  
CMF C4 H4 O4

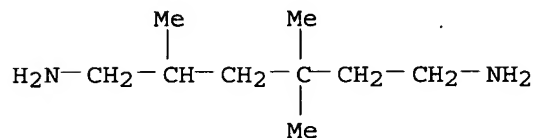
Double bond geometry as shown.



RN 60864-81-5 HCAPLUS  
CN Dodecanedioic acid, polymer with (E)-bis[2-(2-hydroxyethoxy)ethyl]  
2-butenedioate, 1,3-isobenzofurandione and 2,4,4-trimethyl-1,6-  
hexanediamine (9CI) (CA INDEX NAME)

CM 1

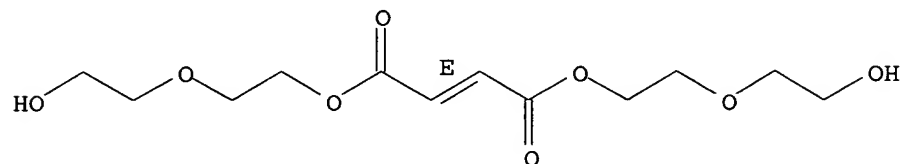
CRN 3236-54-2  
CMF C9 H22 N2



CM 2

CRN 3164-53-2  
CMF C12 H20 O8

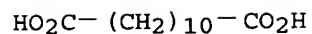
Double bond geometry as shown.



CM 3

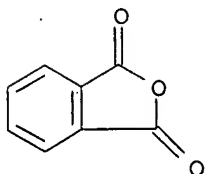
CRN 693-23-2

CMF C12 H22 O4



CM 4

CRN 85-44-9  
CMF C8 H4 O3



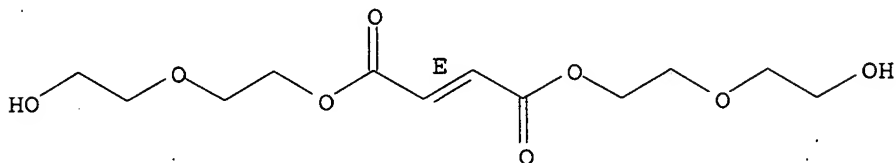
RN 60864-82-6 HCAPLUS

CN Dodecanedioic acid, polymer with (E)-bis[2-(2-hydroxyethoxy)ethyl]  
2-butenedioate and 1,6-hexanediamine (9CI) (CA INDEX NAME)

CM 1

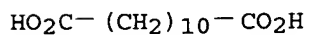
CRN 3164-53-2  
CMF C12 H20 O8

Double bond geometry as shown.



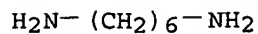
CM 2

CRN 693-23-2  
CMF C12 H22 O4



CM 3

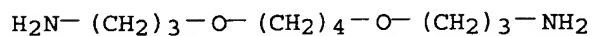
CRN 124-09-4  
CMF C6 H16 N2



RN 60864-83-7 HCAPLUS  
 CN Dodecanedioic acid, polymer with 3,3'-[1,4-butanediylbis(oxy)]bis[1-propanamine], (2E)-2-butenedioic acid and 2,2'-oxybis[ethanol] (9CI) (CA INDEX NAME)

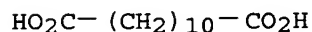
CM 1

CRN 7300-34-7  
 CMF C10 H24 N2 O2



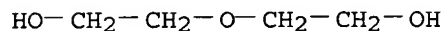
CM 2

CRN 693-23-2  
 CMF C12 H22 O4



CM 3

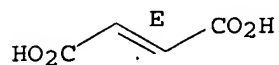
CRN 111-46-6  
 CMF C4 H10 O3



CM 4

CRN 110-17-8  
 CMF C4 H4 O4

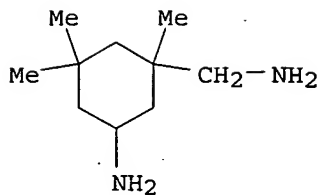
Double bond geometry as shown.



RN 60864-84-8 HCAPLUS  
 CN Dodecanedioic acid, polymer with 5-amino-1,3,3-trimethylcyclohexanemethanamine, (2E)-2-butenedioic acid and 2,2'-oxybis[ethanol] (9CI) (CA INDEX NAME)

CM 1

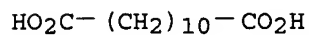
CRN 2855-13-2  
 CMF C10 H22 N2



CM 2

CRN 693-23-2

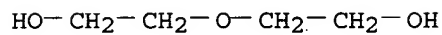
CMF C12 H22 O4



CM 3

CRN 111-46-6

CMF C4 H10 O3

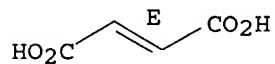


CM 4

CRN 110-17-8

CMF C4 H4 O4

Double bond geometry as shown.



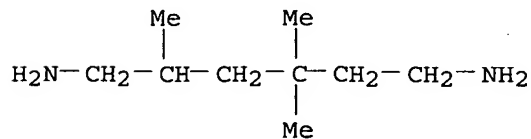
RN 60864-85-9 HCAPLUS

CN Dodecanedioic acid, polymer with (E)-bis[2-(2-hydroxyethoxy)ethyl] 2-butenedioate and 2,4,4-trimethyl-1,6-hexanediamine (9CI) (CA INDEX NAME)

CM 1

CRN 3236-54-2

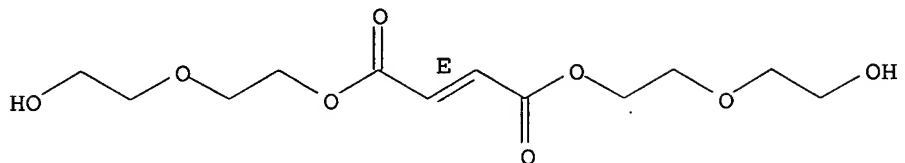
CMF C9 H22 N2



CM 2

CRN 3164-53-2  
CMF C12 H20 O8

Double bond geometry as shown.



CM 3

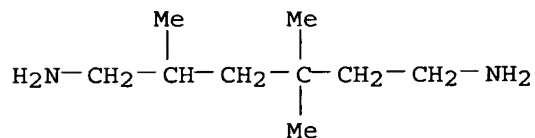
CRN 693-23-2  
CMF C12 H22 O4

HO<sub>2</sub>C-(CH<sub>2</sub>)<sub>10</sub>-CO<sub>2</sub>H

RN 60864-86-0 HCAPLUS  
CN Nonanedioic acid, polymer with (E)-bis[2-(2-hydroxyethoxy)ethyl]  
2-butenedioate and 2,4,4-trimethyl-1,6-hexanediamine (9CI) (CA INDEX  
NAME)

CM 1

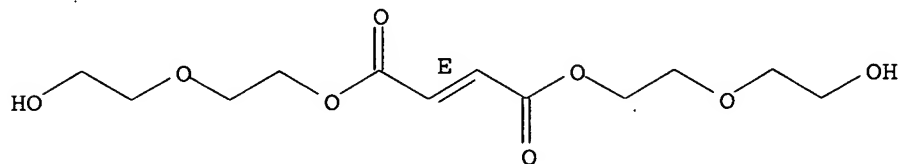
CRN 3236-54-2  
CMF C9 H22 N2



CM 2

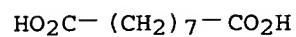
CRN 3164-53-2  
CMF C12 H20 O8

Double bond geometry as shown.



CM 3

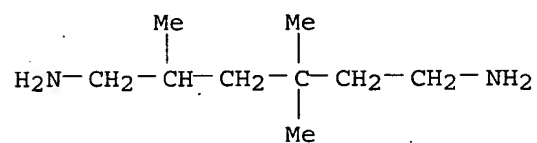
CRN 123-99-9  
CMF C9 H16 O4



RN 60901-54-4 HCAPLUS  
CN Dodecanedioic acid, polymer with (E)-1,2-propanediol 2-butenedioate (2:1)  
and 2,4,4-trimethyl-1,6-hexanediamine (9CI) (CA INDEX NAME)

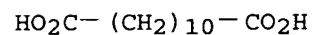
CM 1

CRN 3236-54-2  
CMF C9 H22 N2



CM 2

CRN 693-23-2  
CMF C12 H22 O4



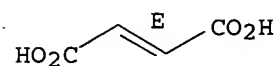
CM 3

CRN 60901-53-3  
CMF C10 H16 O6  
CCI IDS

CM 4

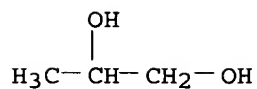
CRN 110-17-8  
CMF C4 H4 O4

Double bond geometry as shown.



CM 5

CRN 57-55-6  
CMF C3 H8 O2

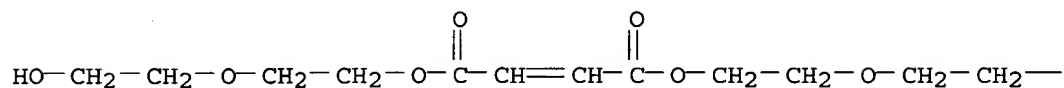


RN 60934-18-1 HCAPLUS  
 CN Dodecanedioic acid, polymer with (E)-bis[2-(2-hydroxymethylethoxy)methylethyl] 2-butenedioate and 2,4,4-trimethyl-1,6-hexanediamine (9CI) (CA INDEX NAME)

CM 1

CRN 60865-31-8  
 CMF C16 H28 O8  
 CCI IDS

PAGE 1-A



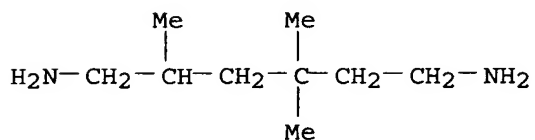
4 ( D1-Me )

PAGE 1-B

—OH

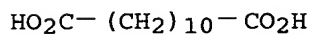
CM 2

CRN 3236-54-2  
 CMF C9 H22 N2



CM 3

CRN 693-23-2  
 CMF C12 H22 O4

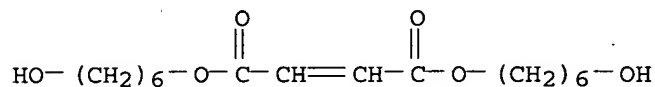




RN 60934-19-2 HCAPLUS  
 CN Dodecanedioic acid, polymer with (E)-bis(6-hydroxytrimethylhexyl)  
 2-butenedioate and 2,4,4-trimethyl-1,6-hexanediamine (9CI) (CA INDEX  
 NAME)

CM 1

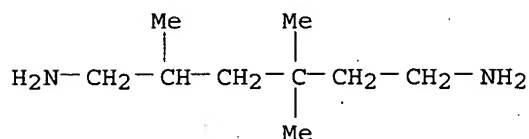
CRN 60865-30-7  
 CMF C22 H40 O6  
 CCI IDS



6 ( D1-Me )

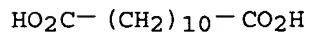
CM 2

CRN 3236-54-2  
 CMF C9 H22 N2



CM 3

CRN 693-23-2  
 CMF C12 H22 O4

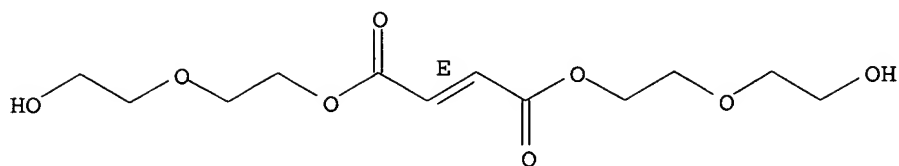


RN 60946-65-8 HCAPLUS  
 CN Dodecanedioic acid, polymer with (E)-bis[2-(2-hydroxyethoxy)ethyl]  
 2-butenedioate, 1,6-hexanediamine and 1,3-isobenzofurandione (9CI) (CA  
 INDEX NAME)

CM 1

CRN 3164-53-2  
 CMF C12 H20 O8

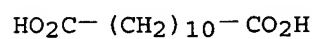
Double bond geometry as shown.



CM 2

CRN 693-23-2

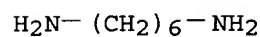
CMF C12 H22 O4



CM 3

CRN 124-09-4

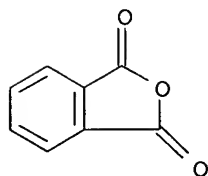
CMF C6 H16 N2



CM 4

CRN 85-44-9

CMF C8 H4 O3



RN 61046-10-4 HCAPLUS

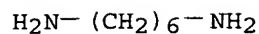
CN Dodecanedioic acid, polymer with (E)-bis[2-(2-hydroxyethoxy)ethyl] 2-butenedioate and 2,2,4(or 2,4,4)-trimethyl-1,6-hexanediamine (9CI) (CA INDEX NAME)

CM 1

CRN 25513-64-8

CMF C9 H22 N2

CCI IDS



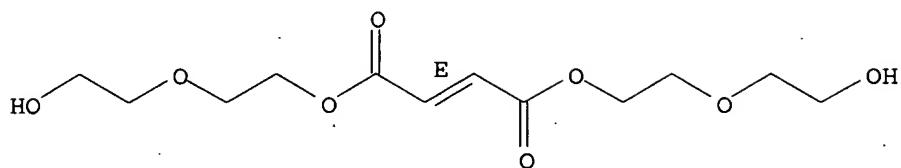
3 ( D1-Me )

CM 2

CRN 3164-53-2

CMF C12 H20 O8

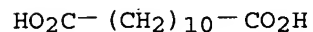
Double bond geometry as shown.



CM 3

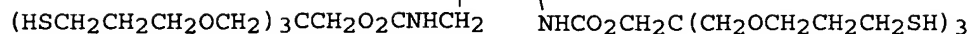
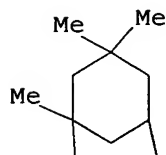
CRN 693-23-2

CMF C12 H22 O4



L29 ANSWER 47 OF 51 HCAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1976:562095 HCAPLUS  
 DOCUMENT NUMBER: 85:162095  
 TITLE: Urethane-containing polythiols  
 INVENTOR(S): Guthrie, James L.; Kehr, Clifton L.  
 PATENT ASSIGNEE(S): W. R. Grace and Co., USA  
 SOURCE: Ger. Offen., 41 pp.  
 CODEN: GWXXBX  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 4  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2603800	A1	19760805	DE 1976-2603800	19760202
BE 838252	A1	19760528	BE 1976-164083	19760203
SE 7601153	A	19760804	SE 1976-1153	19760203
NL 7601068	A	19760805	NL 1976-1068	19760203
FR 2313358	A1	19761231	FR 1976-2970	19760203
PRIORITY APPLN. INFO.: GI			US 1975-546709	A 19750203

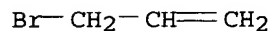


I

AB Urethane polythiol I [60690-26-8] was prepared, which with triallyl isocyanurate (II) gave light-curable coating compns., also useful in the manufacture of printing plates. Thus, pentaerythritol [115-77-5] was etherified with allyl bromide [106-95-6] to give pentaerythritol triallyl ether [1471-17-6], which was treated with tert-BuOOH followed by thioacetic acid to give pentaerythritol tris(3-mercaptopropyl) ether [55937-06-9]. Reaction of this with isophorone diisocyanate [4098-71-9] in 2:1 molar ratio gave I. A mixture of I with II containing benzophenone gave a light-curable coating composition, which when cured gave a film with room-temperature tensile strength  $43.6 \pm 3.8$  kg/cm<sup>2</sup> and elongation at break  $54 \pm 5\%$ .

IT 106-95-6  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reaction of, with pentaerythritol)

RN 106-95-6 HCAPLUS  
 CN 1-Propene, 3-bromo- (9CI) (CA INDEX NAME)



L29 ANSWER 48 OF 51 HCAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1976:45262 HCAPLUS  
 DOCUMENT NUMBER: 84:45262  
 TITLE: Water extendible polyester resins  
 INVENTOR(S): Van Dyk, John C.  
 PATENT ASSIGNEE(S): Woods Research and Development Corp., USA  
 SOURCE: Brit., 9 pp.  
 CODEN: BRXXAA  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 1397143	A	19750611	GB 1972-43140	19720918

PRIORITY APPLN. INFO.: GB 1972-43140 A 19720918

AB Stability of water-in-oil emulsions containing an unsatd. polyester and **styrene** useful as hydraulic cements and molding compns. and for manufacturing insulating material and wood substitutes was improved by use of benzyldimethylamine (I) [103-83-3], morpholine [110-91-8], isophoronediamine [2855-13-2], or trimethylhexamethylenediamine [25513-64-8] as emulsifying agent. Thus, to a resin containing a polyester containing **propylene** glycol 40, phthalic anhydride 36, and maleic anhydride 24 weight % was added 40 weight % **styrene** and 1.25 weight % of

a Co naphthenate soln contg, . Co 6, PhNMe2 0.5, and I 1.7 weight % based on the polyester. Into the resin was dispersed by low shear mixing 0.5 weight % Me Et ketone peroxide and 60 weight % H2O. The emulsion was stable during crosslinking giving, after curing, a solid maleic anhydride-phthalic anhydride-**propylene** glycol copolymer with H2O droplets uniformly distributed throughout. The emulsifying agents also improved stability at high pressures.

IT 25037-66-5

RL: RCT (Reactant); RACT (Reactant or reagent)  
(crosslinking of, with styrene, benzyldimethylamine  
emulsifier for)

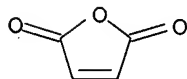
RN 25037-66-5 HCAPLUS

CN 1,3-Isobenzofurandione, polymer with 2,5-furandione and 1,2-propanediol  
(9CI) (CA INDEX NAME)

CM 1

CRN 108-31-6

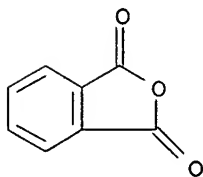
CMF C4 H2 O3



CM 2

CRN 85-44-9

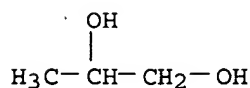
CMF C8 H4 O3



CM 3

CRN 57-55-6

CMF C3 H8 O2



L29 ANSWER 49 OF 51 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1973:137451 HCAPLUS

DOCUMENT NUMBER: 78:137451

TITLE: Curable epoxy resin composition containing a  
substituted diurea compound

INVENTOR(S): Babayan, Eduard P.

PATENT ASSIGNEE(S): Hitco  
 SOURCE: U.S., 5 pp.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3717612	A	19730220	US 1970-48538	19700622
US 3789071	A	19740129	US 1971-187529	19711007
PRIORITY APPLN. INFO.:			US 1970-48538	A3 19700622

AB Epoxy resin compns. containing 1-10 phr diurea compound (I) [39992-90-0] as treated agent had long pot life and were curable at high temperature For example, isophorone diisocyanate in acetone at -15.deg. was treated with Me2NH to give I. Epon 828 [25068-38-6] containing I (0.1 N atom/epoxy equivalent) had gel time (245.deg.F) 40, compared with 25.5 for a composition containing CH2(C6H4NHCONMe2-p)2 and 22.4 for a composition containing MeC6H3(NHCONMe2)2. A composition from Epon 1001 50, Epon 828 35, dicyandiamide 6, I 4, and 2,4,6-tris(dimethylaminoethyl)phenol lactic acid salt 1.5 part was coated on a 5602 Dacron support; the aluminum lap shears of this material curved at 250.deg.F was 4570 psi.

IT 25068-38-6  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (crosslinking of, by diurea compds., for increased pot life)

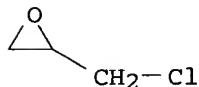
RN 25068-38-6 HCAPLUS

CN Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane (9CI) (CA INDEX NAME)

CM 1

CRN 106-89-8

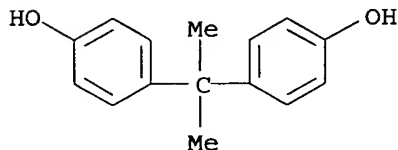
CMF C3 H5 Cl O



CM 2

CRN 80-05-7

CMF C15 H16 O2



L29 ANSWER 50 OF 51 HCAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1970:409080 HCAPLUS  
 DOCUMENT NUMBER: 73:9080

TITLE: Electronic absorption spectra for copper(II) polyamine complexes  
 AUTHOR(S): Hedwig, G. R.; Love, J. L.; Powell, H. K. J.  
 CORPORATE SOURCE: Dep. Chem., Univ. Canterbury, Christchurch, N. Z.  
 SOURCE: Australian Journal of Chemistry (1970), 23(5), 981-7  
 CODEN: AJCHAS; ISSN: 0004-9425

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The preps. and visible and uv absorption spectra are reported for a series of Cu(II) complexes with linear and **cyclic aliphatic** ligands which have 4 N donor atoms. Data are compared with that for 16 analogous complexes. For linear **polyamines** of different chain length, the ligand field strength, as denoted by  $\nu_{\text{maximum}}$  (visible), increases with increasing thermodynamic stability of the Cu(II) complex in aqueous solution. For linear and cyclic ligands the ligand field strength is a maximum for complexes containing a combination of 5 and

6-membered  
chelate rings.

IT 19613-40-2P 29727-15-9P 29898-88-2P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
(preparation and electronic spectrum of)

RN 19613-40-2 HCAPLUS

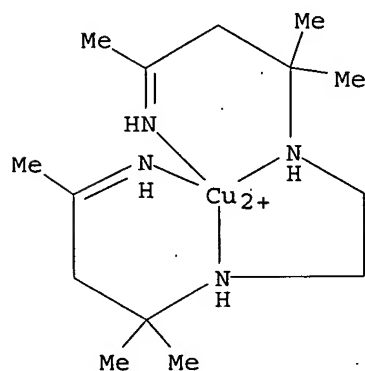
CN Copper(2+), [N,N'-bis(3-imino-1,1-dimethylbutyl)ethylenediamine]-,  
diperchlorate (8CI) (CA INDEX NAME)

CM 1

CRN 46941-32-6

CMF C14 H30 Cu N4

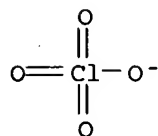
CCI CCS



CM 2

CRN 14797-73-0

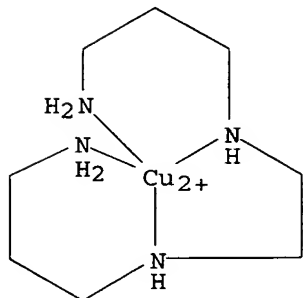
CMF Cl O4



RN 29727-15-9 HCAPLUS  
 CN Copper(2+), [N,N''-1,2-ethanediylbis[1,3-propanediamine-  
 κN,κN']]-, diperchlorate (9CI) (CA INDEX NAME)

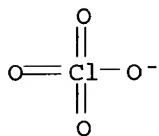
CM 1

CRN 41574-51-0  
 CMF C8 H22 Cu N4  
 CCI CCS



CM 2

CRN 14797-73-0  
 CMF Cl O4

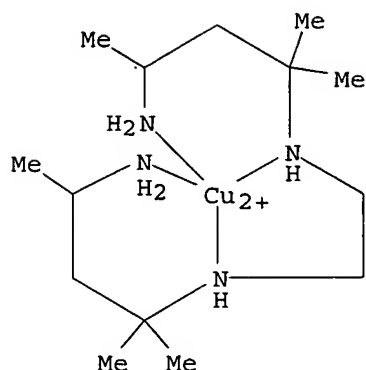


RN 29898-88-2 HCAPLUS  
 CN Copper(2+), [N2,N2'-ethylenebis[2-methyl-2,4-pentanediamine]]-,  
 diperchlorate (8CI) (CA INDEX NAME)

CM 1

CRN 46941-31-5  
 CMF C14 H34 Cu N4  
 CCI CCS

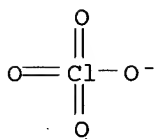




CM 2

CRN 14797-73-0

CMF Cl O4



L29 ANSWER 51 OF 51 HCAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1967:95801 HCAPLUS  
 DOCUMENT NUMBER: 66:95801  
 TITLE: Acrylamide adducts for hardening epoxy resins  
 PATENT ASSIGNEE(S): General Mills, Inc.  
 SOURCE: Neth. Appl., 18 pp.  
 CODEN: NAXXAN  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Dutch  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
NL 6607542		19661202	NL	
DE 1595749			DE	
FR 1481385			FR	
GB 1117383			GB	
US 3505335		19700407	US	19690121
US 3557056		19710119	US	19690121
PRIORITY APPLN. INFO.:			US	19650601

AB Epoxy resins (I) react with acrylamide (II) adducts of cyclic aliphatic or aromatic polyamines containing  $\geq 1$  amine groups and  $\geq 3$  substitutable H atoms, esp. 1, 4-cyclohexanebis(methylamine), 1,4-cyclohexanebis(ethylamine), 1,4-benzenebis(methylamine), aminoethylpiperazine (III), or piperazine, to prepare I compns. in the so-called B-stage useful for fluidized-bed coating. For example, 142 g. II was dissolved in MeOH, brought to a flow-back temperature, mixed slowly with 129 g. III dissolved with MeOH, stirred for 60

min., heated under flow back, and the MeOH was stripped in vacuo to obtain a white solid (II-III adduct) amine number 609 and 24.5% N content, as compared with theoretical 621 and 25.8%, resp. On the other hand, 4460 g. I (epoxy equivalent weight 525, prepared from bisphenol A and epichlorohydrin)

was

mixed at 120° with 1-(2-carbamoylethyl) - 4 - [2 - [(2 - carbamoylethyl)amino]ethyl]piperazine 790, powdered mica (heat stabilizer) 1580, and amorphous pebbles (fluidity control agent) 211 g. and the mixts. obtained were poured onto dry ice to cool rapidly and powdered A test piece (1.1 + 1.1 + 10.2 cm.) was coated with the powders and cured for 2-3 min. at 232°. The coating thickness on the margin of the test piece was 60% to the coating thickness of the flat surface and the coated piece showed a cut-off temperature >238° at the margin.

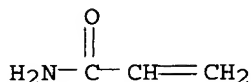
IT 79-06-1, Acrylamide

RL: USES (Uses)

(adducts with cyclic polyamines, for hardening epoxy resins)

RN 79-06-1 HCAPLUS

CN 2-Propenamide (9CI) (CA INDEX NAME)



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